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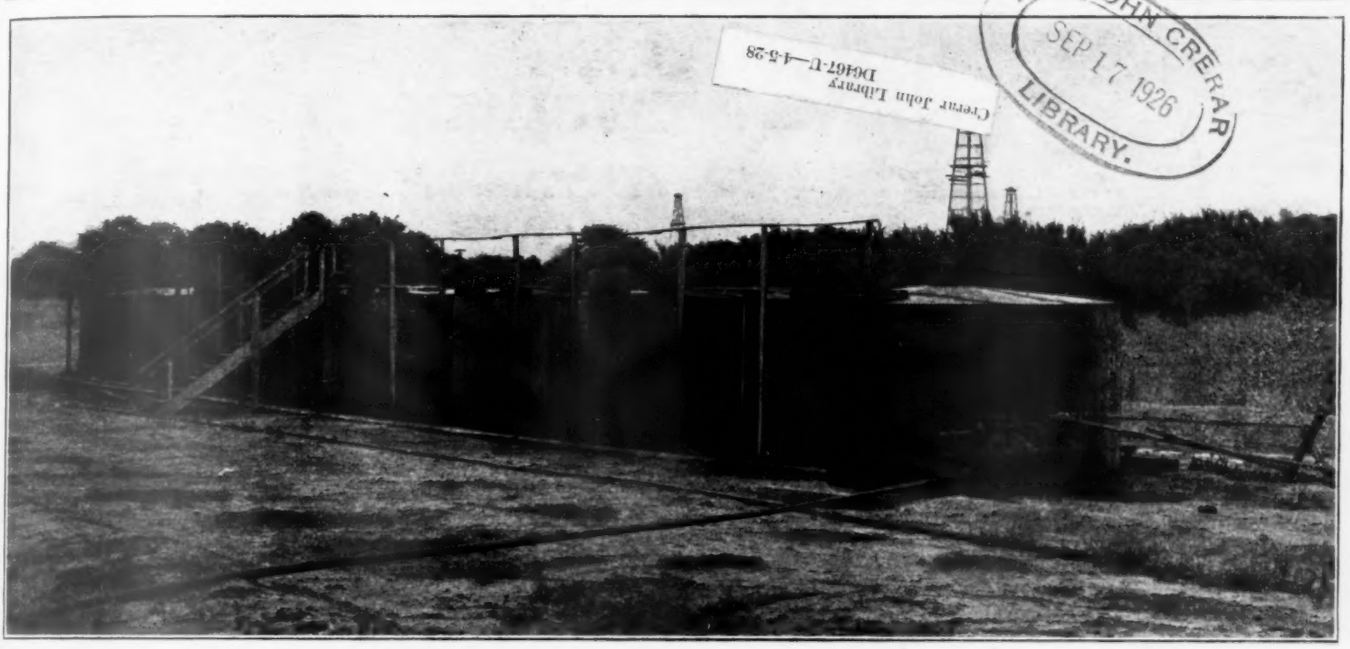

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Advertisers' Index on Page 31 Table of Contents on Page 32

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XUM

The ADVERTISERS' INDEX

A

Acme Fishing Tool Co.
Air Cleaning & Reaming Corp.
Ajax Iron Works 70-71
Ajax Rope Co.
Aluminum Co. of America
Amarillo Abstract Co. 162
American Appraisal Co. 153
American Asphalt Paint Co. 120
American Car & Foundry Co.
American Mfg. Co. of Texas
American Radiator Co.
American Roller Bearing Co. 122
American Rolling Mill Co.
American Schaeffer & Budenberg Corp.
American Sheet & Tin Plate Co.
American Spiral Pipe Works 134
American Telephone & Telegraph Co.
American Well Works
Anderson & Anderson 160
Anderson, Carl B. 162
Andrews Steel Co. 133
Arco Company, The
Armstrong Bros. Tool Co. 137
Askania, Werke, A. G.
Athey Truss Wheel Co.
Atlas Ball Co.
Auer, C. A.
Austin Co.
Axelson Machine Co. 26

B

B. & A. Specialty Co.
Baash-Ross Tool Co. 130
Babcock & Wilcox Tube Co., The
Baker Casing Shoe Co.
Baldwin Chain & Mfg. Co.
Barber-Greene Co.
Barnickel, Wm. S., & Co. Inside Front Cover
Barnsdall Refineries, Inc.
Bartlesville Supply Co. 102
Belle City Mfg. Co. 82
Bessemer Gas Engine Co. 25
Bignell & Keeler Machine Works
Black Steel & Wire Co.
Blackmer Pump Co.
Blaw-Knox Co.
Borden Co. 133
Bovaird & Seyfang Mfg. Co. 127
Bovaird Supply Co., The
Braden Co.
Brady Conveyors Corp.
Braun, C. F., & Co.
Bridgeport Machine Co. ..... Back Cover
Bristol Co. 134
Broderick & Bascom Rope Co.
Brokaw, Dixon, Garner & McKee 160
Brooks Engineering Corp. 84
Brown, Arthur C. 162
Brownell Co.
Brown Instrument Co. 75
Brown & Thomsen 161
Brown Tool Co., Inc.
Buckeye Traction Ditcher Co.
Buda Co.
Buffalo-Gasolene Motor Co. 29
Burns Tool Co.
Burt Corporation
Burt Mfg. Co.
Busch-Sulzer Bros. Diesel Engine Co.
Butler Mfg. Co.
Byers, A. M., Co. 12
Byron Jackson Pump & Mfg. Co., Inc.

C

Camera Craft Studios 137
Campbell, J. A.
Canadian Pacific Railway Co.
Carbondale Machine Co. 91
Caudill, Samuel J. 160
Celite Products Co. 109
Central Forging Co.
Central Steel Co.
Central Tube Co. 135
Chain Belt Co.
Chapman Machine & Forging Co.
Chaplin-Fulton Mfg. Co. 135
Chapman Valve Mfg. Co.
Chestnut & Smith Corp. 28
Chicago Bridge & Iron Works
Chicago Pneumatic Tool Co.
Chicago Steel Foundry Co.
Chisholm-Moore Mfg. Co.
Clapp, Frederick G. 162
Clark Bros. Co. 160
Clark, Robert W. 160
Classified Wants 138-139
Cleveland Tractor Co.
Cleveland Trencher Co., The 63
Climax Engineering Co.
Coatesville Boiler Works
Columbian Rope Co.
Columbian Steel Tank Co.
Columbus Forge & Iron Co. 162
Columbus Sucker Rod Co.
Continental Motors Corp. 113
Continental Supply Co. 65
Cooper, C. & G., Co. 49
Cox & Sons Co., The
Crane Co. 30
Crane Packing Co.
Crown Central Petroleum Corp. 86
Cushing Tim, Tool & Supply Co.

D

D. & R. Pump & Supply Co.
D. & N. Specialty Co.
Darling Valve & Mfg. Co. 90
Dart, E. M., Mfg. Co.
Davis, G. M., Regulator Co. 96
Dayton Pipe Coupling Co.
Dearborn Chemical Co.
De La Vergne Machine Co.

D

Delta Electric Co.
Detroit Graphite Co.
Diamond Drill Carbon Co. 162
Dixon, Joseph, Crucible Co. 122
Dodge Mfg. Co.
Donovan Boiler Works, Inc. 85
Dresser, S. R., Mfg. Co. 41
Dunn Mfg. Co. 21
DuPont De Nemours & Co., Inc., E. I.
Durabla Mfg. Co.
Durham Company, The 108

E

Eagle-Picher Lead Co. 2
Earnshaw, G. W. 160
Eastern Torpedo Co. 137
Eclipse Paint & Mfg. Co.
Edward Valve & Mfg. Co.
Elliott Core Drilling Co.
Empire Refineries, Inc.
Emsco Derrick & Equipment Co.
Equitable Meter & Mfg. Co.
Eureka Burner Co.

F

Fairbanks-Morse & Co. 17-18
Farley Machine Works Co.
Federal Supply Co.
Fenwick-Reddaway Mfg. Co.
Fisher Governor Co.
Foamite-Childs Corp.
Fohs, F. Julius 161
Foos Gas Engine Co.
Ford Chain Block Co. 124
Ford Motor Co.
Fort Worth Laboratories 162
Foxboro Co., Inc., The 106
Franklin Valveless Engine Co. 76-77
Frick-Reid Supply Co. 55
Full Crawler Co.

G

Gallagher Co.
Gardner Governor Co. 107
Garlock Packing Co. 89
Gaso Pump & Burner Mfg. Co.
..... Inside Back Cover
General American Tank Car Corp.
General Insulating & Mfg. Co.
General Motors Truck Co.
General Oil Tools Co.
Gilbert & Barker Mfg. Co. 111
Gilfillan Machine Works 162
Gomory, W. L. 160
Goodrich, B. F., Rubber Co.
Goodyear Tire & Rubber Co. 11
Gott, H. P., Mfg. Co. 135
Goulds Pumps, Inc. 161
Graham Brothers
Gray Processes Corp.
Graver Corp 145
Greenspon's, Joseph, Sons Iron & Steel Co. 126
Griscom-Russell Co. 104
Guiberson Corp. 51
Gulf Refining Co.

H

Halliburton Oil Well Cementing Co. 57
Harrisburg Pipe & Pipe Bending Co.
Hazard Mfg. Co. 88
Heppenstall Forge & Knife Co.
Herald Brothers 160
Hercules Motors Corp.
Hercules Tool Co.
Heydrick Mapping Co. 162
Hill, Hubbell & Co. 87
Hills-McCanna Co.
Hinderliter Tool Co.
Homestead Valve Mfg. Co. 169
Hood, H. H. 160
Hoover Steel Ball Co.
Hope Engineering & Supply Co. 160
Hopkins, Edwin B. 161
Hornblower & Weeks
Hough, Charles N., Mfg. Co. 124
Hoyt Metal Co.
Hughes Tool Co. 69
Humble Oil & Refining Co.
Hunt, Robert W., Co. 136
Huntley & Huntley 162

I

Illinois Glass Co. 98
Imperial Belting Co.
Imperial Royalties Co. 137
Ingersoll-Rand Co.
International Derrick & Equipment Co.
International Harvester Co. of America 16
International Supply Co.
Iron King Mfg. Co. 119

J

Jarecki Mfg. Co.
Jefferson Union Co. 67
Johns-Manville, Inc. 125-126
Jones, S. M., Co.

K

Kansas City Hay Press Co.
Kaw Steel Construction Co.
Kellogg, M. W., Co. 111
Kelly, John Eoghan 161
Kelly-Springfield Tire Co.
Kennedy Valve Mfg. Co. 123
Kerotest Mfg. Co.
Kerr, John B. 161

K

Keuffel & Esser Co.
Kewanee Boiler Co.
Key Boiler Equipment Co. 132
Kinley, M. M., Co.
Kirk & Hoover 162

L

Landis Machine Co. 3
Larkin & Co.
Layne & Bowler Co.
Leblecker Tool Co. 73
Leschen, A., & Sons Rope Co.
Linde Air Products Co. 1
Link-Belt Co. 6
Longyear, E. J., Co. 161
Lucey Mfg. Corp. 117
Ludlow Valve Mfg. Co.
Lufkin Rule Co.
Lunkenheimer Co.

Mc

McCord Radiator & Mfg. Co. 126
McGregor Working Barrel Co.
McIntosh & Seymour Corp.
McJunkin Supply Co.
McKee, Arthur G., & Co.
McNutt, V. H. 161

M

Magnolia Petroleum Co.
Maloney Tank Mfg. Co. ..... Front Cover
Manzel Bros. Co.
Marco Light & Power Corp., The 136
Marion Machine Foundry & Supply Co. 14
Marsh Gauge Pole Co.
Master Builders Co.
Mathieson Alkali Works, Inc.
Matson, George C. 161
Maverick, Phillip 160
Meier, E. C., Lubricating Co.
Merco Nordstrom Valve Co. 121
Messmer, H. H. 161
Metric Metal Works 61
Midwest Piping & Supply Co.
Miller Improved Gas Engine Co.
Miller, Max R., & Co., Inc.
Mineral Exploration Co.
Mine Safety Appliance Co.
Missouri Wood Working Co. 161
Moon Mfg. Co.
Moore, Lee C., & Co., Inc. 5
Mosler Metal Products Corp. 137
Munn & Co. 162
Murray Rubber Co. 115
Murray Tool & Supply Co. 110
Myers, F. E., & Bro. Co. 161

N

Nabors, W. C., Co.
National Carbon Co., Inc. 1
National Gas Products Corp.
National Lead Co.
National Petroleum Engineering Corp. 161
National Petroleum Marketers Assn.
National Pigments & Chemical Co. 127
National Supply Co. 83
National Transit Pump & Machine Co. 80
National Tube Co.
National Turnbuckle Derrick Co.
Newton Process Mfg. Co. 39
Norris Bros., Inc.
Norris, W. C.
North American Car Co. 103
Northern Fire Apparatus Co.
Northern Oil Information Bureau 162
Northrup Equipment Co.
Nuttall, R. D., & Co.
Nye Tool & Machine Works 7

O

O'Brien Steel Construction Co. 132
Oertling, L., Ltd.
Ohio Steel Foundry Co.
Oil Conservation Engineering Co.
Oil Country Specialties Mfg. Co. 8
Oil Insurance Association
Oil Well Supply Co. 94-95
Oklahoma Armature Repair Co.
Oklahoma Steel Casting Co.
Oxweld Acetylene Co. 1

P

Parkersburg Machine Co.
Parkersburg Rig & Reel Co.
Partrige-Scotford Stamp & Stencil Co. 137
Patrick, R. S. 131
Pattin Brothers Co. 119
Penberty Injector Co. 120
Pennsylvania Engineering Works 109
Petroleum Appliance Co.
Petroleum Iron Works 105
Pforzheimer, Carl H., & Co.
Pickering Governor Co.
Pittsburg Boiler & Machine Co.
Pittsburgh-Des Moines Steel Co.
Pittsburgh Meter Co. 127
Pittsburgh Steel Products Co. 15
Plibrico Jointless Firebrick Co.
Plymouth Cordage Co.
Porter & Co. 43
Powell, William Co.
Power Mfg. Co.
Power Piping Co. 162
Power Plant Equipment Co.
Power Specialty Co.
Prescott Co., The
Prest-O-Lite Co., Inc., The 1
Pure Oil Co. 22
Pyle-National Co. 112

R

Ranney Oil Mining Co. 161
Ratigan, J. P., Co.
Reading Iron Co. 27
Reading Steel Casting Co., Inc. 9
Reed Roller Bit Co. 79
Regan Forge & Engineering Co. 23
Reid, Joseph, Gas Engine Co. 114
Republic Flow Meters Co.
Republic Iron & Steel Co.
Republic Supply Co. 59
Rich, John L. 162
Ridge Tool Co.
Ring, DeWitt T. 160
Riter-Conley Co. 162
Robinson, A.
Roots, P. H. & F. M., Co.
Ross Heater & Mfg. Co., Inc.
Ross-Meehan Foundries 160
Ryerson, Joseph T., & Sons, Inc. 160

S

Safety Pulling Machine Co.
Sargent Engineering Corp., The 128
Schutte & Koerting Co. 129
Shaffer, J. E., Co.
Shaffer Tools Works
Shaw, S. F.,
Sheffield Steel Corp.
Sherwin-Williams Co.
Shippers' Car Line Corp.
Simplex Equipment Co.
Sinclair Refining Co. 151
Sivyer Steel Casting Co.
Skelly Oil Co.
Skinner, M. B., Co. 134
Smith, A. O., Corp.
Smith Separator Co. 4
South Chester Tube Co.
Southern Cornice Works
Southwestern Engineering Corp.
Southwestern Engineering Co., Inc.
Spang & Co. 19
Spang, Chalfant & Co., Inc. 20
Spence Machine Co. 160
Spencer Trailer Co.
Stalter, Walter 161
Standard Engineering Co.
Standard Seamless Tube Co. 101
Stanley Belting Corp. 128
Star Drilling Machine Co.
States Engineering Co., The
Stearns-Roger Mfg. Co.
Strom Steel Ball Co.
Sullivan Co., The
Sullivan Machinery Co.
Superior Tube Co.

T

Taubman Supply Corp.
Templeton, Kenly & Co., Ltd.
Texas Company, The
Timken Roller Bearing Co.
Titusville Forge Co.
Titusville Iron Works
Toledo Pipe Threading Machine Co. 131
Trimont Mfg. Co.
Trumble Gas Trap Co.
Truscon Steel Co. 116
Twin Disc Clutch Co.

U

Union Machine Co.
United Alloy Steel Corp. 10
United Iron Works, Inc. 92
United States Cast Iron Pipe & Fdy. Co. 129
United States Rubber Co.
Universal Oil Products Co. 47
U. S. Tool Co. 81

V

Van Convering, M. 160
Victaulic Co. of America
Vogt, Henry, Machine Co.
Volz Engineering Equipment Co.

W

Wall Rope Works, Inc. 93
Walsh & Weidner Boiler Co. 115
Walworth Co.
Warren Petroleum Co.
Waukesha Motor Co. 53
Westcott & Greis
Western Machinery Co.
Western Supply Co.
Westinghouse Electric & Mfg. Co.
Wheeling Steel Corp.
Wickwire-Spencer Steel Co. 13
Wico Electric Co. 99
Williams, Herbert E. 160
Williams, J. H., & Co.
Williamsport Development Co.
Williamsport Wire Rope Co.
Williams Tool Corp. 123
Wilson Oil Tools Corp. 97
Wilson Welder & Metals Co.
W-K-M Company, Inc.
Wood & Wood 161
Worthington Pump & Mach. Corp. 118
Wright Mfg. Co. 78-A-78-B

Y

Yale & Towne Mfg. Co.

Z

Zero Hour Torpedo Co.

WHAT AND WHERE TO BUY—PAGES 183-184-185

XUM

The Oil and Gas Journal

PRODUCING REFINING MARKETING

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TABLE OF CONTENTS

SPECIAL ARTICLES

Crude Production Falls 18,878 Bbls. ... 33
By James McIntyre
Texas Panhandle output reaches new high and Magnolia Petroleum Co. cuts its crude price. Seminole menaces.

Pitfalls in Oil Board's Recommendation ... 35
By Phillip Kates
Would require entire reconstruction of the industry and set up state regulation.

Association Work Pays Big Dividends ... 36
By O. P. Keeney
President of National Petroleum Association points to advantages during year.

Departmental Activities in Association Work ... 36
By Fayette B. Dow

Most of the Oil Produced by Few ... 37
By James McIntyre
Striking preponderance of total produced by very small percentage of operators in Oklahoma and Texas.

Overcoming Obstacles in the Tropics ... 38
Magnificent work of American engineers backed by the solid Colombian Government.

A Dangerous Report (Editorial) ... 40

Technical Questions Answered ... 42
By Dr. C. K. Francis

Seminole Pool Offers New Sensation ... 44
Amerada-Gardner well finds Wilcox sand, throwing open region that will surpass the Cromwell Field in area.

Proper Maintenance of Wire Rope ... 78
By Walter Voigtlander, M. E.

Protection in Drilling Contracts ... 93
By Lawrence Mills

Dr. Thom on Use of Soda Ash Method ... 122
By Charles E. Kern

Companies Round Out Operations in Direct Sales ... 124
By L. M. Fanning

Standard Test for Antiknock Fuel ... 147
By L. M. Fanning
Director of Ethyl Gasoline Corp. announces discovery of new octane to measure value.

FIELD OPERATIONS

Late Fields ... 44

Panhandle ... *45-50*
By C. D. Lockwood

North Texas ... 46
By C. D. Lockwood

Oklahoma ... 48
By J. L. Dwyer

Mexico ... 48
By George Blardone

Kansas ... 50
By J. L. Dwyer

Gulf Coast ... 52
By P. L. McGreal

Louisiana-Arkansas ... 54
By James H. Dameron

Artesia, New Mexico ... 54
By Special Correspondent

Southwest Texas ... 58
By B. D. Stevenson

Rocky Mountain Area ... 60
By Frank B. Taylor

Canada ... 60
By Victor Lauriston

California ... 62
By L. P. Stockman

Pennsylvania-West Virginia ... 64
By D. S. Wakenight

Kentucky-Tennessee ... 64
By Whit

Central West ... 66
By Whit

REFINING AND MARKETING

Oklahoma Refined Market Easier ... 34
By Neil Williams
Gasoline, kerosene and some fuel oil prices shaded as demand for petroleum products slackens.

Chicago Expects No Material Change ... 140
By J. B. Waldo

Eastern Market Optimistic ... 141
By N. O. Fanning

Electrical Power for Pumping Practical ... 142
By C. O. Willson
Skelly Oil Co. installation at Eldorado, Kans., refinery gives satisfactory results.

Refining and Marketing News ... 144

Plant Operators' Page ... 146

Refinery and Crude Prices ... 148-149

Tankwagon Quotations ... 150

Making Oil Tests at Gasoline Plants ... 159
By E. D. Cummings
Additional apparatus in distillation test of absorption oil give more accurate data.

ARTICLES OF GENERAL INTEREST

The Advertisers' Index ... 31

Men Known in Oildom and Personals ... 68

Natural Gas Developments ... 72

Equipment and Supplies ... 74

Oil Country Goods Demand Continues ... 74
By B. E. V. Luty

Bureau of Mines Statistics for July ... 87

Classified Want Advertisements ... 138-139

Oil Securities Active and Irregular ... 152
By N. O. Fanning

Detailed Field Operations for August ... 163

What and Where to Buy ... 183-184-185

Crude Petroleum Statistics ... 186

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Refinery Section Starts on Page 140

Crude Production Falls 18,878 Bbls.

Highest daily average estimated production week ended May 30, 1925, 2,347,984 bbls. Lowest in 1925, January 3, 1,911,730 bbls.

Texas Panhandle Output Reaches New High and Magnolia Petroleum Co. Cuts Crude Price. Seminole Menaces

By James McIntyre

Highest daily average estimated light oil production in 1925, week ended January 17, 1,525,220 bbls. Lowest in 1925, July 18, 1,374,173 bbls.

A sharp decline in the production of the Spindletop Field in the Gulf Coast in Texas; a 4,500-barrel decline in the output of the California fields; a drop of more than 3,000 barrels in the Rocky Mountain fields, and the regular weekly decline in the Smackover fields in Arkansas were mainly responsible for a falling off of 18,878 barrels a day in the estimated average daily production for the week ending last Saturday.

The Texas Panhandle fields reached a new high, with an average of 117,729 barrels a day, with 350 wells actively drilling, regardless of whether or not there is a market for the crude and regardless of the influence the anticipated production may have on the market for crude oil. There have been disquieting rumors coming out of the Panhandle Field that some producers there were looking for buyers of crude below the market price and other reports to the effect that new purchasers were contemplating entering that field to take advantage of bargain crude they expected to find there. That there was some truth in the stories was attested by the fact that on Tuesday of this week the Magnolia Petroleum Company rearranged its Panhandle gravity schedule and cut its crude prices to a point where they range from $1.15 for oil of 34 gravity and below to $1.45 for crude of 38 gravity and above. The company had been paying from $1.35 to $1.60 for crude below 34 gravity and $1.85 and $1.90 for crude of 38 gravity and above. When this was written none of the other large buyers had met the Magnolia cut.

Texas is breaking all its past records as a producer of oil. In the past week its daily average production was 593,946 barrels. This is more oil than Oklahoma ever produced in a single day and was within 1,200 barrels of the daily production of California last week. The average production of Texas for the 12 months ending with July was 375,954 barrels, or 220,000 barrels below its last weeks' daily average.

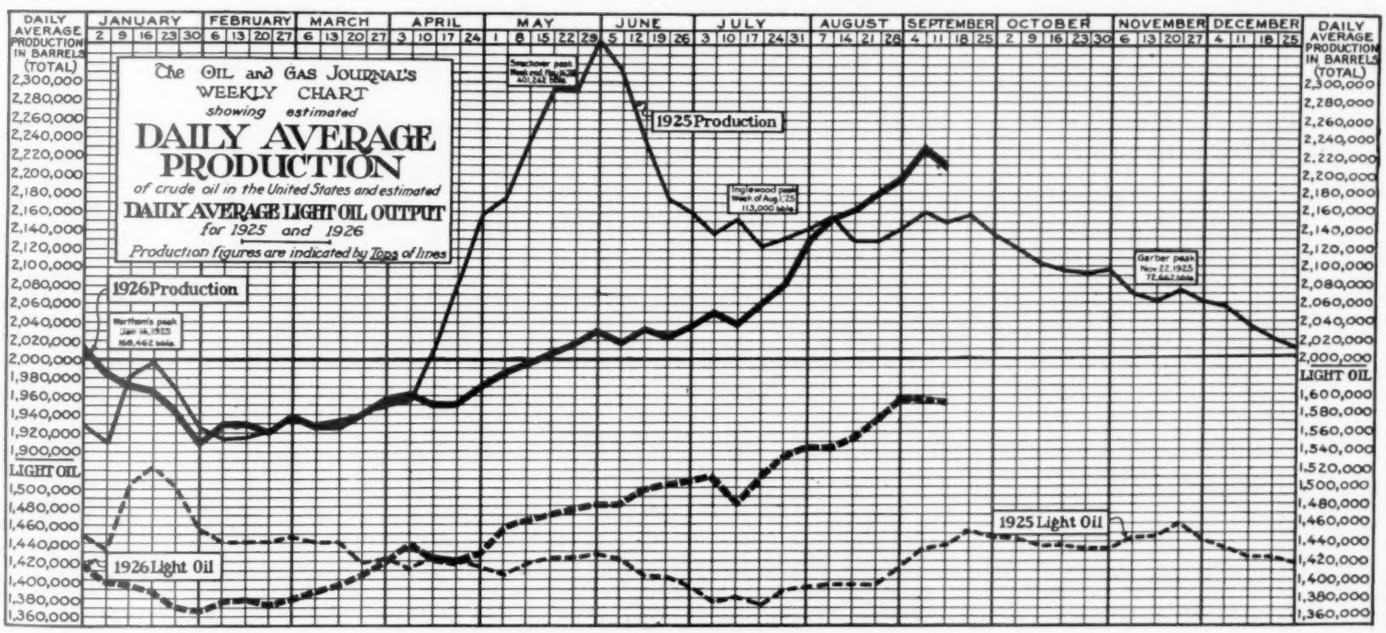
The Panhandle field is getting a taste of what overproduction will do to the price structure. Oklahoma oil producers have ahead of them the possibility of a similar situation in the Seminole Field in Seminole County, which is expected to lead all Oklahoma fields in production by November 15, or earlier, because of the large number of wells that are being drilled within an area which is believed to be sure to yield large production.

PRODUCTION IN THE UNITED STATES

Estimated daily average production of light and heavy gravity crude oil in the United States for week ended September 11, and a comparison with the previous week follows:

	Sept. 11		Sept. 4	
	Light	Heavy	Light	Heavy
Oklahoma—				
Tonkawa	40,620	.....	39,660	.....
Burbank	49,060	.....	48,540	.....
Other Osage Fields	34,200	.....	34,260	.....
Cushing and Shamrock	21,500	.....	21,520	.....
Bristow and Eastern Bristow	27,610	.....	27,820	.....
Cromwell	15,620	.....	15,860	.....
Garber	29,400	.....	31,370	.....
Blackwell-Braman	21,960	.....	23,040	.....
Seminole	17,345	.....	15,630	.....
Wewoka	30,430	.....	32,310	.....
Northern Miscellaneous	114,600	.....	111,100	.....
Southern Fields	64,900	.....	65,650	.....
Total Oklahoma	467,245	.....	466,760	.....
North Louisiana	42,415	13,535	41,900	14,900
Arkansas—				
Smackover	14,765	120,375	14,890	122,610
Miscellaneous	19,085	.....	19,450	.....
Total Arkansas	33,850	120,375	34,340	122,610
North Central and West Texas	187,167	.....	184,835	.....
Texas Panhandle	117,729	.....	116,101	.....
Powell	27,750	.....	28,300	.....
Mexia, Currie, Richland	14,375	.....	14,650	.....
Nigger Creek	19,100	.....	19,400	.....
Wortham	6,550	.....	6,800	.....
Kansas	112,550	.....	112,750	.....
Total Mid-Continent Area	1,028,731	133,910	1,025,836	137,510
Gulf Coast	.....	191,785	.....	199,175
Southwest Texas	.....	43,990	.....	46,360
Eastern	109,000	.....	108,500	.....
Rocky Mountain Area	106,897	.....	110,310	.....
California—				
Santa Fe Springs	48,500	.....	48,500	.....
Long Beach	98,500	.....	101,000	.....
Huntington Beach	45,000	.....	45,000	.....
Torrance	5,000	23,000	5,000	23,000
Dominguez	23,000	.....	21,500	.....
Rosecrans	14,000	.....	15,000	.....
Inglewood	25,700	18,300	26,000	19,000
Ventura Avenue	50,000	.....	49,500	.....
Remainder of State	41,000	207,500	41,500	210,000
Total California	350,700	248,800	353,000	252,000
Total United States	1,595,328	618,485	1,597,646	635,045
Grand Total	2,213,813		2,232,691	

Total Decrease, 18,878 Bbls.; Light Oil Decrease, 2,318 Bbls.



WHAT AND WHERE TO BUY—PAGES 183-184-185

Oklahoma Refined Market Easier

Gasoline, Kerosene and Some Fuel Oil Prices Shaded As Demand for Petroleum Products Slackens

By Neil Williams

A generally easier tone prevailed in the Oklahoma (Group 3) refined market the past week. This resulted in marked weakening of lower gravity gasolines, kerosenes and heavier grades of fuel. Natural gasolines also were sagging on the edges but distillates and gas oil continued firm in price.

Practically the entire market was exceptionally quiet Monday and Tuesday. Even inquiries for 390 and 400 endpoint gasolines, which have kept up fairly steady the last few weeks despite the sluggishness of motor fuels, slackened materially.

The dullness of Group 3 gasolines is blamed directly on the rains which have been soaking the central northern and middle western states for more than two weeks. There has been very little let-up in these storms during this period and this has cut down the motor consumption to a telling degree.

Considering this, requirements of jobbers are light and, as a result, calls on refiners for material have been few. Previous to the Labor Day holidays jobbers bought fairly heavy in anticipation of a large distribution. So far there has been little opportunity for jobbers to dispose of this material and other cars in transit to be delivered the first half of September. This leads market students to believe that jobber storage at present is fairly well stocked and that there may be but little demand for gasolines the remainder of the month.

Slowing of Demand

While there is not a great amount of excess gasoline in the hands of Oklahoma refiners as a whole, this slowing up in demand from jobbers has resulted in reductions of from an eighth to a quarter of a cent in virtually all grades of gasoline. The drop in the 400 endpoint activity was the most outstanding as this material, which a week ago was held strongly at 11½ to 11¾ cents, was available freely at 11¼ cents Tuesday. There was some buying of 64-66 375 and the 68-70 360 gasolines by one large jobber but these orders were placed with North Texas refiners.

As was the case several weeks ago when gasoline was soft, cheap material now being offered from North Texas and North Louisiana refiners is proving a bearish element in the Group 3 situation. These other refining districts are reported to be placing motor fuel on Chicago and other northern jobbing markets at delivered prices on a par or less than the Oklahoma market, all of which not only makes that much more material available but also forces disastrous price competition.

Higher Gravity Play

However, more interest now is being centered on trends of higher gravity gasolines, particularly the 60-62 400 endpoint product, and possibilities of their demand this autumn and winter, than on the U. S. Motor fuel. It is the general opinion there will be a bigger play on these than ever.

There usually is a better demand for 400 material in the autumn and winter than in summer but this year the demand began much earlier and in greater amount. Several large refiners say their orders for this gasoline, exclusive of those placed by The Texas Company and other large buyers, were greater than

(Continued on Page 158)

REFINED MARKET BAROMETER

The easing up of nearly all petroleum products in the Mid-Continent-Chicago areas was the only decided change in refined markets of the country the past week. In that district, the sluggish movement caused reductions in prices of gasolines, kerosenes and lower grades of fuel. In other refining centers, east of the Rocky Mountains, gasolines continued firm to strong although consumption was reduced due to unfavorable weather. Kerosene was firm on eastern markets with the demand still heavy but it was reported that buyers had feelers out for California material, which may bring considerable cheap material to the East Coast. In California kerosene has been consistently weak due to a break in the China export market. Fuel oil, gas oil and distillates were strong in the East and where there has been a steady increase in demand. Gas oil and distillates and lighter ends of fuel also were firm in the Mid-Continent but somewhat less in demand. At present there is an exceptionally good demand for furnace oils. Lubricating oils were fairly steady with exceptions but there has been a slight falling off in Mid-Continent shipments. Wax was weak.

Mid-Continent—Market generally easier as demand slackens. Gasoline and kerosene prices reduced eighth to quarter cent, marking turn in trends of past few weeks. Higher gravity gasolines for domestic use being bought in some areas. Natural gasoline slower but prices not materially weaker. Fuel oil generally inclined to weakness but lighter ends continue firm. Gas oil and distillates steady. Lubricants slower. Wax still quiet.

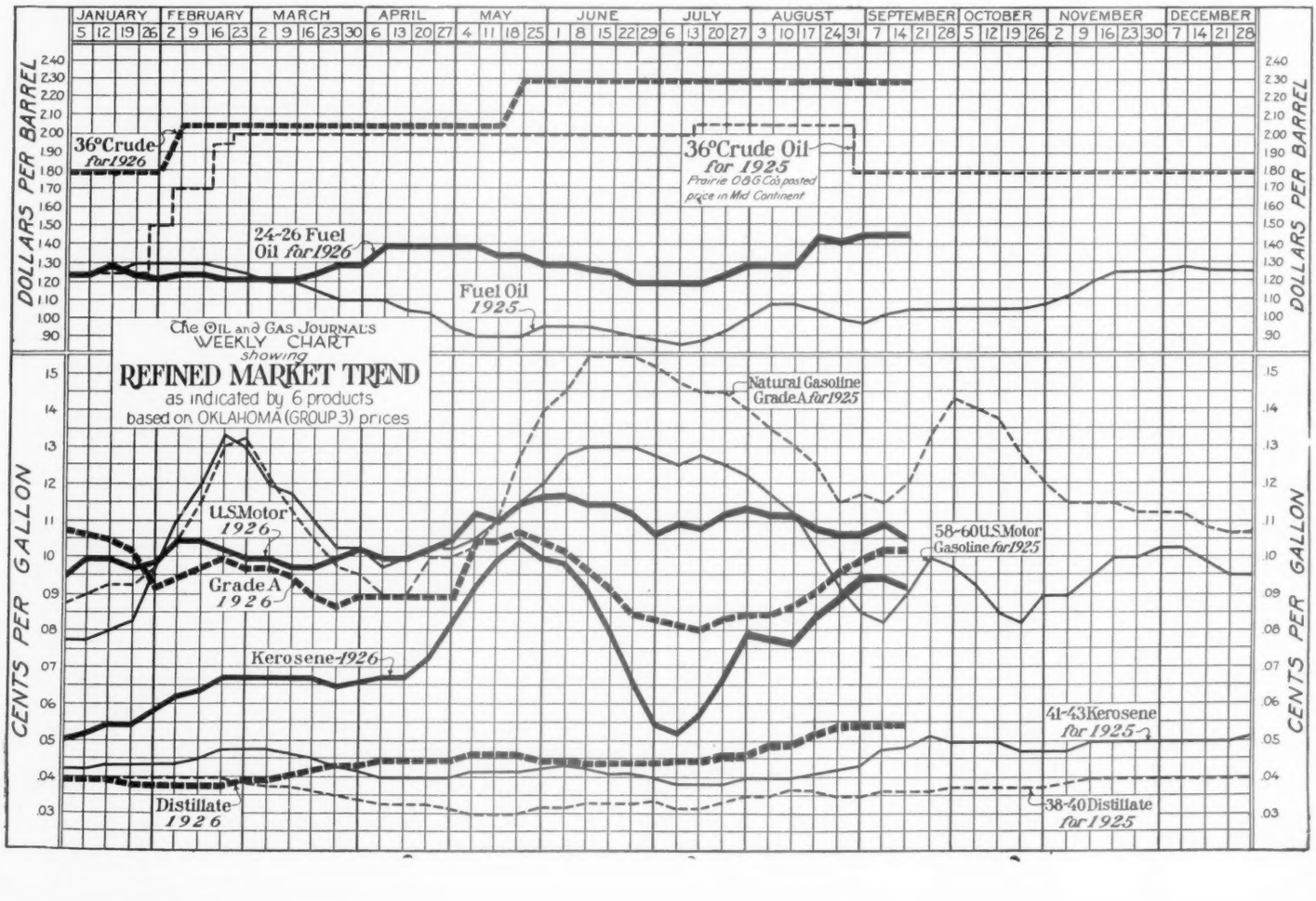
Atlantic Seaboard—Consumption of gasoline and lubricating oils slightly off but market generally firm. Kerosene still strong but action of buyers seeking California material being watched. Furnace oil in good demand. Gas oil and fuel oil steady. Lubricants unchanged. Wax mixed. Petrolatum improves.

Pennsylvania—Gasoline and naphtha strong. Fuel oil in good demand. Neutrals stiff but cylinder stocks and wax weaker.

Chicago—Cheap material offered from some points in the Mid-Continent depresses Chicago gasoline market. Kerosene also freely obtainable and at lower prices. Distillates continue in good demand. Fuel oil and gas oil steady.

California—General situation unchanged. Gasoline still unsettled. Natural gasolines easy.

Gulf Coast—All lubricating oils steady. Markets unchanged.


JANUARY FEBRUARY MARCH APRIL MAY JUNE JULY AUGUST SEPTEMBER OCTOBER NOVEMBER DECEMBER
DOLLARS PER BARREL
CENTS PER GALLON
36° Crude for 1926
24-26 Fuel Oil for 1926
36° Crude Oil for 1925
Prairie O&G Co posted price in Mid Continent
Fuel Oil 1925
The Oil and Gas Journal's WEEKLY CHART showing
REFINED MARKET TREND
as indicated by 6 products based on OKLAHOMA (GROUP 3) prices
Natural Gasoline Grade A for 1925
U.S. Motor 1926
Grade A 1926
58-60 U.S. Motor Gasoline for 1925
Kerosene 1926
41-43 Kerosene for 1925
Distillate 1926
38-40 Distillate for 1925

Pitfalls in Oil Board Recommendation

Would Require Entire Reconstruction of the Industry and Set up State Regulation. Communistic Idea Impractical

By Phillip Kates*

The preliminary report of President Coolidge's Oil Conservation Board has been made public, and transmitted to the President. It is signed by the Secretary of the Interior as chairman, the Secretary of the Navy, the Secretary of Commerce, the Secretary of War. It thus represents the conclusions reached, after long conferences with the leaders in the oil industry, by the official representatives for the United States Government, of the national defense, on sea and land; and of the trade and business of the country. The recommendations of such important officials cannot but have great effect on the policy of the oil industry, and their ideas will undoubtedly profoundly affect future legislation, both in Congress and in the State Legislatures. If their basic idea is in accord with the policy of the Department of Justice, and will be received in a friendly spirit by the legislatures of the states, the co-operative program, heretofore urged in detail in the pages of The Oil and Gas Journal should be seriously and immediately considered by the larger units in the industry.

The Federal Oil Conservation Board's report is, upon analysis, one of the most arresting pronouncements of the Government since the enactment of the antitrust laws. Unless it means less than it says, or unless the Government shall fail to be in accord with its spokesmen, it means, in effect, a reversal of the traditional policy of American politics towards big business. For it urges the working out of co-operative agreements between the units of the industry in the producing, the refining and the marketing of petroleum. It would thus appear that the Administration will permit and encourage the reorganization of the industry on the basis of sane co-operation, instead of compelling ruinous and continued competition. The more specific suggestions, made at this time, are mainly as to co-operative methods of producing oil; but the principles are urged as to the operation of the industry as a whole.

A Spectacular Statement

Certain recommendations of this preliminary report, however, may unless they are carefully explained give the industry serious concern. Thus, the recommendation that the Federal Government make no move towards regulating the industry is based upon the want of power in the central government, except in times of national emergency. However, the operation of the land and sea and air units of the national defense depends very materially on oil, and the spectacular statement in the report that "the reserves of oil available by flowing and pumping wells from present producing and proven field amount to * * * but six years' supply," may well give to those who demand immediate Government control a basis for an argument that such an emergency now confronts the nation as would justify Federal interference. This estimate is qualified in later paragraphs of the report, and it is pointed out that new fields, new methods of recovery and improved methods of refining may largely increase the estimate of recoverable reserves. In the light of the history of the industry it is extremely misleading, as the board is careful to note, to base calculations upon the computed reserves of the present proven area, based either on older methods of recovery, or of refining yield. For the advance of even the past few years in geology, and in chemistry, and in the mechanics of lifting oil from the sands, give great hope that the future will see these figures of recoverable reserves continuously increased, and in fact that our surest assurance of continued future supply will be the so-called depleted fields of the present day.

But the effect of the statement as to reserves, as it appears in the report, may be somewhat unfortunate on the public mind. It is one of the spectacular statements in the report, and one that every news distributing agency has put on the wire, it will receive more publicity than any other part of the board's findings, and the qualifying statements that later appear in the report will not get to the public.

In view of the fact that the other departments of the Government are announcing improved methods of recovery, which will add many times to our present reserves; that new refinery processes are increasing the ultimate yield of all the important petroleum products, and that the industry itself is becoming more and more alive to the importance of what have hitherto been considered the depleted fields, it would seem that the concentration of public attention on the vast reserves in the ground might have been more fortunate. It is hoped that the board may make a special study and report on the feasibility of the new methods of recovery, and eliminate from the public mind the misconception which this one paragraph in its preliminary report has so unfortunately given.

State Regulation

The report, contrary to the first impression received, does advocate governmental regulation, but by the states instead of the National Government. In fact, a considerable portion of the report contains recommendations of legislation on various subjects to be enacted by the various State Governments. In view of the experience of the oil industry with State Governments, this recommendation of the board is rather disturbing. It is true that the spokesmen for the industry in the hearings have succeeded in securing the recommendation that the Federal Government keep its hands off, but only because of a want of power. On the economic side, however, the board makes exhaustive recommendations for Government control. Unless the report receives careful consideration by the various regulating state agencies, and by the various state Legislatures with an interpretation of the recommendations by the board, the industry may well wish that the Federal Government were in control. A recommendation that there be no governmental control whatever, which is what the industry hoped for, and what the first notices of the board's report led the industry to expect was what the report contained, is vastly different from a recommendation that the regulation be put in force by the states, instead of by Congress.

Constructive Suggestion

But the constructive spirit of the report is the recommendation that the oil industry be reorganized on the basis of co-operation rather than competition. "There should be," says the board, "active co-operation between the oil producing states in the study of proposed legislation to the end that uniform laws may be enacted, or even agreements or compacts between the states subject to ratification by Congress. Even more pronounced should be the co-operation between the state agencies having authority in the regulation of oil and gas production, and the Federal bureaus whose investigative fields are essentially coterminous with the administrative jurisdiction of the state organizations * * * Co-operation within the industry can effect economies all along the line. In development and production, a better balancing of supply to demand, when and where the oil is needed; in transportation, better planning, thus avoiding cross hauls of crude and cross hauls of products; in distribution, less duplication of marketing facilities, which at times even involve an expense equal to the cost of production and refining. Large savings in both production and refining are possible through the general adoption of the best technique already used by the more progressive units.

The practical working out of this broad recommendation will, in effect, be to reorganize the whole industry as a co-operative unit; an oil trust, in the sense in which the term is used in the reorganization of the basic industries of Germany. Intense individualists may call the plan Socialistic, but it is the sober conclusion pragmatically transmitted to the President of the United States, by very important and able members of his Cabinet, after consideration both by technical experts on the part of the Government, and the leaders in the industry itself. And of the report George H. Jones, chairman of the board of the Standard Oil Company of New Jersey, says in a public interview: "The report, in my opinion, is very constructive. It indicates a willingness on the part of the Government to co-operate with the industry in husbanding of present resources and to look with approval upon the efforts of oil companies to assure themselves of future supplies by incursions into and exploitation of foreign fields."

Startling Idea

Although the specific recommendations as to co-operation are largely confined to the operation of the oil fields by the producers of crude, the suggestion is for co-operation within the industry in all branches. To secure this it may be necessary, as the board suggests, to secure agreements between the oil producing states, ratified by Congress. The idea may be somewhat startling: oil treaties between the sovereign states. But the very suggestion of the plan by the board shows the importance with which it regards co-operation between the states, to permit co-operation within the industry.

While it is believed that the report is subject to criticism in some respects, as will be pointed out, from the practical standpoint, it may be that its apparent defects come rather from the fact that it is a preliminary report, and that the various matters referred to will be the subject of more specific recommendations. Certainly there is danger in statements that are not precise, and that may be variously interpreted in the various states, even in a desire to carry out the recommendations of the board.

Unless clarified by subsequent reports, some of the recommendations as to state legislation may be misunderstood, as was the statement as to the amount of future reserves.

In urging co-operation within the industry, the board says:

"The question of the countrywide influence of such co-operative action on either supply or price would, moreover, under any legalized procedure, be always subject to 'appropriate and adequate governmental scrutiny,' quoting from counsel of the American Petroleum Institute, 'to the end that these owners might not be stimulated to undue haste and a wasteful competition in the development of their properties and trade, but might have a greater liberty to consult the economic conditions of the industry from time to time.'"

This "appropriate and adequate governmental scrutiny" is to be that of the state Governments, for the report says further: "This suggestion involves many interesting implications concerning state and Federal power, but state legislation for the protection of all owners would be preferable and the Federal authority, if any, should be invoked only when it is clear that the state is unwilling or fails to act, or when naval reserves are threatened with depletion."

Any state legislation providing for "appropriate and adequate governmental scrutiny to the end that these (lease) owners might not be stimulated to undue haste and a wasteful competition in the development of their properties," surely deserves the most careful consideration from the industry. In view of the fact that oil and gas leases are private contracts (except on governmental lands) and the drilling provisions are covered by agreement between the landowner and the lessee, complications from unconsidered legislation may be grave. Legislation providing that a well is not to be opened until adequate tankage has been provided has been enacted (or rather a regulation of a public board, to that effect has been adopted) in at least one state; but that is the prevention of waste of oil from a determined field in a completed well. Counsel may refer to such regulations, and the matter will probably be cleared up in a subsequent report.

Another suggestion contained in the report is so

(Continued on Page 154)

*This is the fifth of a series of articles by a Tulsa attorney who has made a study of the petroleum industry.

Association Work Pays Big Dividends

President of National Petroleum Association Points to Advantages Accruing to Membership During Past Year

By O. P. Keeney*
President, National Petroleum Association

When Mr. Dow assigned me the subject "Products and By-Products of Association Work" the first thoughts that came to my mind in relation to it were of the meat packing industry. The meat packers are reputed to utilize completely all the animal products and by-products, down even to the squeal of the pig. Then, naturally, came the thought as to whether or not the members of the National Petroleum Association were completely utilizing all the products and by-products of Association Work.

I do not wish, pessimistically, to assume an universal negative and argue on the assumption that all of the members are not fully utilizing all the possible products and by-products of the National Petroleum Association. But I cannot honestly say that all the members have even approximately attained all the possibilities. An adequate realization of the possibilities of the National Petroleum Association makes more possible their attainment.

To paraphrase from Conwell's famous allegory: There are treasures of opportunity so readily accessible and so familiar that we overlook them. How many acres of diamonds do you see. The more you see, the more you can yourself acquire.

Have you ever leaned back in your chair, put your feet on the desk and asked yourself the question, "Why do I support and help the National Petroleum Association?" The tip-of-the-tongue and unthinking answer would be, because you feel that it is worth while and because you more than get your money's worth. That is all true, but there is a bigger and broader answer. Some of you vividly remember, and all of us know, the reason for the formation of the National Petroleum Association. Just the good old proposition of hanging together to prevent being hanged separately. But this is a different day. There are other reasons for taking part in the National Petroleum Association work not so apparent, but fully as important. The possible products and by-products of the National Petroleum Association of today are the justifying reason for membership and active participation in its work.

The most valuable products and by-products for you may not be the same as for me. Each can very largely choose and use the ones which will be most useful and profitable to him. There is self-determination both as to choice of products and value of by-products. While the products differ they will all be included under the typically twentieth century heading — Progress — progress for your company in various phases; cutting operating costs; legitimately improving marketing conditions; information and assistance on traffic matters; solving of knotty, legal and tax problems; wiser interpretation of vitally important trade statistics; preventing unnecessary fire losses, both of property and life, increasing earnings through more intelligent supervision of operations by improved cost and general accounting methods; avoiding unnecessary and unpleasant disputes with customers in regard to quality of products; improving the attitude of the public toward our industry; legitimate efforts against unfair legislation; provision of a readily accessible forum for discussion of mutual problems; securing new ideas from inspection visits to other refineries; acquiring helpful technical knowledge from interlaboratory visits; securing greater uniformity in testing methods and establishment of better standards and specifications; interchange of credit information; welfare work for employes, pension plans and accident prevention.

These are some of the possible products and by-products for your company. Do you think I have painted too rosy a picture? Every phase I have mentioned is already in the program of activities of the National Petroleum Association. We are most fortunate in having the services of Mr. Dow and his talented, energetic assistants. Enlargement or improvement of this program, or your getting more than you may have been getting in the past from any phase, does not depend upon the employed officers, but upon the individual response in voluntary service from the members.

Advantages to Individual

But there are also products and by-products for the individual. These, too, all fall under the heading of Progress—Progress for you in these phases: Wider range of friendships; contacts helpful in making you worth more in your job; increased knowledge of all the technical, theoretical and practical phases of one of the most complex industries in the world, knowledge of the men and the affairs vital to your success; development of your qualities for leadership; self education; gratification of reasonable ambition; and satisfaction—the satisfaction of service, the satisfaction of helpfulness, the satisfaction of worth while accomplishment. Although you are getting more than your money's worth, without putting something of yourself into National Petroleum Association work. It is axiomatic that the more you put in the more you get out.

The National Petroleum Association has the longest history of any oil association and also the finest traditions. Money didn't make the wonderful record. Personalities, ideals and unselfish service brought us this hearing. Man is debtor to mankind. You can't pay your debt by only paying your dues. These are the reasons why the most valuable products and by-products of National Petroleum Association work cannot be bought with money but require unselfish service.

Of course, most of us have our bread and butter job, our time is not solely our own, and there are countless other uses for our time and energy, both for profit and pleasure. But where there is a will there is some sort of a way. Nothing unreasonable or out of proportion is either expected or is desirable from any standpoint. Some time during the year, and in some way, you can make your reasonable contribution of personal service. There have been many contributions of this sort to the National Petroleum Association.

I hold to the truth of this proposition: That the products and by-products of National Petroleum Association work which have paid the donors in the past will amply pay every donor in the future.

Prove this proposition to the profit of your company and to yourself.

*Annual meeting National Petroleum Association, Atlantic City, September 15.

DEPARTMENTAL ACTIVITIES IN ASSOCIATION WORK BENEFICIAL

By Fayette B. Dow*
Counsel, National Petroleum Association

When Mr. Keeney was selected president, it is my impression that without saying anything about it he made up his mind that he would find out whether our departments could function usefully or were impractical under the conditions confronting a trade association. The question, stated in another way, was this: Must the work of the association be done in the main by its employed staff or can the members themselves devote a reasonable amount of time to it profitably? In the past the employed staff had done the work. Was it feasible to expect busy men to take up new phases of co-operative work and could they get results which would compensate them for the effort?

There was no way to find out except by trying. We have had two years of experiment. What is the result?

In some of our departments—for example, manufacture, standards and tests, welfare and insurance—we have made enough progress to believe that the plan of what we may call "member activity" is basically sound. In manufacture we have employed engineers to show how savings may be made in the boiler houses with the thought that the members, having been taught the best practices, would see that they were put into actual operation. There may be differences of view as to the net results in dollars and cents. Some members will swear by our plan, others will swear at it. The majority will take a position somewhere between these two extremes. It is no part of my purpose here to analyze the results of our experiment in the co-operative purchase of engineering services. But we have seen our members come out of their isolation and I do not believe that they will ever go back to it. One of our trustees chose as the slogan for his department: "Two men exchange one dollar each. Each has a dollar. Two exchange one idea each. Each has two ideas." Old habits are changed slowly. For many years our members kept their methods of operation to themselves thinking that those methods were superior, unknown to others, and that some advantage was to be gained by building a fence around them. Then they learned that their methods never had been superior, had long been known, and perhaps long since discarded. The newer trend toward co-operative action by the members themselves in the interest of more efficient operation is a step forward and has brought about a noteworthy change in the work of the association. Formerly the association was largely a defensive alliance for protection against an aggression which no company could combat alone. It is now rapidly becoming the common forum for educative effort along very practical lines.

An examination of the reports of our departments will show the tendencies to which I have referred. There are some fields of our association's activities which by their nature must remain largely the province of its employed staff. This is particularly true of legislation and litigation, and of traffic and transportation. To the staff will also fall the administrative and executive duties in the whole range of activities.

The association has had a good year. Our membership has increased. We have lived within our income, without extra assessments. The work has been done with energy and determination. I believe all members of the association know that they have an effective organization. It can be improved, made still more effective. That is our purpose for the coming year.

Better Economic Conditions

Our members in common with the industry as a whole have been passing through a very difficult economic period. In four consecutive summers at the height of seasonal consumption gasoline prices were badly broken. Crude oil production exceeded requirements. Too much gasoline was manufactured, stocks were too large. In this situation competition for markets inevitably brought lower prices. In consequence financial results of operations were very unsatisfactory, for the large as well as the small units in the industry. This year somewhat better conditions have prevailed. An examination of the Bureau of Mines figures shows that for the 12 months ended June 30, 1926, the consumption of petroleum and its products exceeded current production and imports by 17,015,000 bbls., or a daily average of 46,616 bbls. There have been advances in gasoline prices in 1926 (now the subject of an investigation by the Federal Trade Commission) but these advances amounted to a recovery no greater than the decline of those prices in 1925. Prices are still under the restraint of large stocks of crude in storage. Gasoline stocks in relation to consumption are less than in recent years. On June 30, 1926, at the rate of June consumption, there was 46 days' supply, as compared with 62 days in 1925 and 63 days in 1924. The tendency for the past year has been clearly in the direction of stabilization, but the experience of the industry in recent years shows that the relation of supply to demand can be quickly thrown out of balance. The production of too much crude or the refining of too much crude means lower prices and inventory losses. No company or group of companies is powerful enough, nor by any conceivable combination could be powerful enough to prevent the working of that economic law.

Hand to Mouth Buying

Throughout industry generally no change in practice is perhaps more noteworthy than what has been described as "hand to mouth buying." Orders are being placed for reasonably immediate rather than remote requirements, manufacturers are making what is ordered and not piling up stocks against anticipated demands. The result is a more even flow from raw materials to consumption, steadier plant operation, less speculation and less depression of prices from competition of accumulated stocks. In the oil industry, consumption requirements have been increased from year to year but manufacturing capacity has also been greatly increased. Notwithstanding the seasonal character of the petroleum demand stocks of finished products have been and are larger than necessary. While there has been an improvement in this respect, it is reasonable to believe that further study of the cost of carrying stocks and their market influences will bring manufacturing output closer to current consumption.

If the trend toward stabilization continued the financial results of operation should become more adequate and satisfactory than they have been in recent years. For the refineries with relatively small output it would seem that there must be an unceasing effort to reduce the costs of manufacture. Too keen competition for market outlets has made the costs of distribution excessive. There are many marketing practices which are

(Continued on Page 158)

*Annual meeting National Petroleum Association, Atlantic City, September 15.

Most of the Oil Produced By Few

Striking Preponderance of the Total Production Produced by Very Small Percentage of Operators in Oklahoma and Texas

By James McIntyre

The dominance of the big, well-financed and well-managed oil company in the production of crude oil is becoming more and more evident as the years pass. The commanding place of the combined producing and refining organizations is being strengthened as time goes on. There was a period in the oil industry when the refiner was only a refiner and the producer did nothing but drill for and produce crude. The early years of the oil business saw these branches of the industry far apart and often bitterly at war. Then began the period where the refiner entered the production field and the producer broke into the refining end of the business. Now we see that 17 of the 20 largest oil producers in Oklahoma in the first half of this year were, at the same time, refiners, also purchasers of crude oil and 12 of the 20 largest producers in Texas in the first half of the year are refining companies as well, or financially affiliated with refining companies.

The gross production reports of the States of Oklahoma and Texas for the first half of the year, if digested, develop some interesting facts.

Few Produce Bulk of Oil

For example, in Oklahoma, where approximately 1,450 names are listed as oil producers, 10 per cent, or 145 companies, firms and individuals, produced 92 per cent of all the crude brought to the surface in the first half of the year. The 10 per cent produced 76,342,001 bbls. of a total of 82,907,831 bbls. The 90 per cent, or 1,305 oil operators, produced 8 per cent of the oil, or 6,565,830 bbls. The average production of 10 per cent of the operators was 2,908 bbls. per day, or 421,784 bbls. for the six months, ranging all the way from a total of 5,880,915 bbls. for the Comar Oil Co. to production of about 60,000 bbls. for the same period by numerous operators.

54 on Select List.

Now, while it is a startling fact that 145 companies produce 92 per cent of Oklahoma's oil output, it is just as significant that 54 companies or 3.7 per cent of all the operators in the state produced 67,229,165 bbls. of crude or 81 per cent of the total. The 54 companies represent those which produced an average of 1,000 bbls. a day or more. The leading company produced an average of 32,491 bbls. a day and the average production of crude among the whole 54 leaders was 6,882 bbls. per day. Of the 54 leaders, the first 10 produced 47 per cent of the total and the first 20 produced 66 per cent. Thus seven per cent of the operators in the state were responsible for the production of nearly two-thirds of Oklahoma's six months' oil output.

Changes in 5 Years

Nearly all the companies in the select list of Oklahoma producers are old line organizations; that is they have been in the Oklahoma field five years at least, the Deep Rock Oil Co. being a notable exception. Nearly all the companies listed show a very considerable increase in their production in the second quarter of 1926 over that of the second quarter of 1921, indicating that they have ever been vigilant in the search for new producing fields. The following companies show increases, the first figure being that for the the second quarter of 1921 and the second that for the same period in 1926: Comar Oil Co. from no production to 5,880,915 bbls.; Magnolia Petroleum Co., 1,375,850 bbls. to 2,959,952 bbls.; Sinclair Oil & Gas Co., 647,976 bbls. to 2,340,144 bbls.; Gypsy Oil Co., 862,795 bbls. to 2,205,564 bbls.; Prairie Oil & Gas Co., 1,380,795 bbls. to 2,163,410 bbls.; Phillips Petroleum Co., 744,612 bbls. (part of it owned by partners) to 1,863,179 bbls. Roxana Petroleum Corp., 816,228 bbls. to 2,128,947 bbls.; Marland Refining Co., 475,555 bbls. to 1,158,763 bbls.; Amerada Petroleum Corp. from 471,675 bbls. to 1,405,976 bbls.; Skelly Oil Co., 660,101 bbls. to 917,465 bbls.; Wentz Oil Corp. from 170,281 bbls. (McCaskey & Wentz), to 798,721 bbls.; Barnsdall Oil Co. from 50,956 bbls. to 791,746 bbls.; Pure Oil Co. from 407,384 bbls. to 716,662 bbls.; Tidal Oil Co. & Tidal Osage Oil Co. from 497,722 bbls. to 740,841 bbls. Independent Oil & Gas Co. from 17,492 bbls. to 647,449 bbls.; T. B. Slick from 21,207 bbls. to 379,856 bbls.

A few of the larger companies show slight decreases when the two periods are compared, and there were other companies not named, which increased their production, but the above will give the reader a good line on the growth of oil companies made possible by the steadily increasing public demand for crude oil.

Leading Producers in Oklahoma in First Half of 1926

(Production averaging 1,000 bbls. or more per day.)

Rank and Company—	Prod. 6 Mo. Bbls.
1 Comar Oil Co.	5,880,915
2 Magnolia Petroleum Co.	5,548,116
3 Sinclair Oil & Gas Co.	4,712,056
4 Gypsy Oil Co.	4,240,738
5 Prairie Oil & Gas Co.	3,837,035
6 Phillips Petroleum Co.	3,564,163
7 Roxana Petroleum Corp.	3,217,089
8 Carter Oil Co.	3,115,814
9 Marland Refining Co.	2,754,563
10 Mid-Continent Pet. Corp.	2,430,591
11 Amerada Petroleum Corp.	2,221,798
12 The Texas Company	2,107,153
13 Skelly Oil Co.	1,881,658
14 Wentz Oil Corp.	1,855,839
15 Barnsdall Oil Co.	1,556,691
16 Pure Oil Co.	1,435,237
17 Tidal Oil and Tidal Osage Oil Co.	1,410,173
18 Independent O. & G. Co.	1,058,648
19 Shaffer Oil & Refining	954,364
20 Twin State Oil Co.	828,791
21 T. B. Slick	807,585
22 Producers & Refiners Corp.	728,048
23 Dixie Oil Co.	705,232
24 Josey Oil Co.	678,141
25 Southwestern Pet. Co.	608,050
26 Humble Oil & Refining Co.	607,755
27 Wolverine Oil Co.	590,267
28 Mid-Kansas Oil & Gas Co.	531,278
29 Wilcox Oil & Gas Co.	472,033
30 Olean Petroleum Co.	386,957
31 Transcontinental Oil Co.	379,163
32 Empire Gas & Fuel Co.	353,475
33 Indian Ter. Ill. Oil Co.	351,860
34 Coline Oil Co.	336,626
35 Continental Oil Co.	333,682
36 Atlantic Oil Producing Co.	329,418
37 Devonian Oil Co.	324,222
38 Kewanee Oil & Gas Co.	312,892
39 Deep Rock Oil Co.	305,162
40 Blackwell Oil & Gas Co.	278,550
41 Lewis Oil Co.	266,177
42 McCulloch Oil Co.	265,135
43 Silurian Oil Co.	254,772
44 Frank Buttram	241,417
45 McMan Oil & Gas Co.	239,481
46 Sapulpa Refining Co.	237,402
47 Texas Pacific C. & O. Co.	236,745
48 Cosden Oil & Gas Co.	232,367
49 C. G. Tibbens	226,532
50 Champlin Refining Co.	219,067
51 Midland Oil Co.	203,628
52 Selby Oil & Gas Co.	199,248
53 Papoose Oil Co.	188,926
54 Pennok Oil Co.	188,442
Total 54 leading companies.	67,229,165
Total all companies	82,907,831

In Texas the very large oil companies dominate the situation even more than in Oklahoma. The largest producer in Texas in the first half of the year was the Gulf Production Co., which is credited with 6,377,079 bbls. as against the Comar Oil Co.'s 5,880,915 bbls. which was the largest production in Oklahoma. In Texas the Humble Oil & Refining Co. ranked second with 6,280,611 bbls. as against 5,548,116 bbls. for the Magnolia Petroleum Co in Oklahoma. The three largest producers in Texas in the first half are credited with a total of 17,564,270 bbls. or 28.8 per cent of the entire Texas production for the period, while the three largest producers in Oklahoma with a combined total of 16,141,087 produced 19.5 per cent of the Oklahoma total.

Ten oil companies out of a total of 935 listed as producers in the Texas gross production report, produced 56 per cent of the total. Twenty oil companies produced two thirds of all the oil and 41 companies, each with a production of 1,000 bbls. a day or more over the six months' period, were responsible for 76.5 per cent of all the crude the state produced in the period under discussion. Ninety-three operating organizations, 10 per cent of the companies in the state, were credited with 88.5 per cent of the state's oil output, while to the remaining 832 operators goes the credit of producing 11.5 per cent.

Changes in Last Half

The last half of the year will show a great increase in the production of listed companies that are operating in the Panhandle Field in Texas and the Spindletop area. Companies like the Dixon Creek Oil Co., Canyon Oil Co., Yount Lee Oil Co., Phillips Petroleum Co. and some others will cut a much larger figure in the production annals of Texas than they ever have before.

Some of the largest operators in Texas were not known five years ago. The Big Lake Oil Co., the Group No. 1 Oil Co., both operating in Reagan County Field; the United North and South Oil Co., now owned by the Magnolia Petroleum Co., which developed the Luling Field; J. K. Hughes Development Co., Yount Lee Oil Co., Grayburg Refining Co., California Co., Landreth Production Co., Ryeade Oil Corp., Marland Oil Co., Roeser and Pendleton, Stroube & Stroube, Murchison & Fain, Barkley & Meadows, Witherspoon Oil Co., Pandem Oil Co and Navarro Oil Co., are among the leaders in Texas present day production, whose names did not appear on the gross production list published in mid-year, 1921.

The older companies for the most part have kept up with the ever-increasing demand for crude oil. Especially is this true of the Gulf Production Co., the Magnolia Petroleum Co., the Pure Oil Co. (which shows an increase from 1,378 bbls. in the second quarter of 1921 to 1,211,348 bbls. in the same quarter this year), the Phillips Petroleum Co., which increased from 19,557 bbls. in the second quarter of 1921 to 951,093 bbls. in the second quarter of 1926; the Sun Oil Co. which increased from 146,627 bbls. to 361,775 bbls. and the Simms Oil which increased from 148,021 bbls. to 327,219 bbls between the same two periods. In the second quarter of 1921 the Gulf Production Co. produced 2,472,822 bbls. and in the same period in 1926, 3,383,666 bbls. while the Magnolia Petroleum Co. increased from 1,020,487 bbls to 2,187,207 bbls. The Rio Bravo Oil Co. advanced from 51,113 bbls. to 318,175 bbls.

Advancement Since Cushing Days

When the great Cushing Field was at its height in 1915, when it was the greatest producing field the world had ever known, with a peak exceeding 300,000 bbls., the entire production of Oklahoma for the year was 117,910,444 bbls. This was an average of 58,955,222 bbls. for a six-month period. The first 41 producing companies this year, less than 4 per cent of all the operators in the State, produced over 8,000,000 bbls. more crude in the first half of the present year than the 1915 production for the same length of time of all operators then producing in the state. And in the height of Cushing's big production it was thought by many oil men that Oklahoma would never again reach the output it did that year. Indeed, they had some reason for so believing, as it was not until 1922 that the production of Oklahoma exceeded that of 1917, and yet the 1922 output, averaged into half-year periods, was less than the production in the first half of this year of 3.7 per cent of the operators.

Leading Producers in Texas in First Half of 1926

(Production averaging 1,000 bbls. or more per day)

Rank and Company—	Prod. 6 Mo. Bbls.
1 Gulf Production Co.	6,377,079
2 Humble Oil & Refining Co.	6,280,611
3 The Texas Company	4,906,580
4 Magnolia Petroleum Co.	3,582,285
5 Big Lake Oil Co.	3,498,950
6 Pure Oil Co.	2,561,605
7 United North & South Oil Co.	2,436,466
8 Group No. 1 Oil Corp.	2,089,122
9 Republic Production Co.	1,470,418
10 Phillips Petroleum Co.	1,145,188
11 Yount Lee Oil Co.	940,520
12 Sun Oil Co.	762,574
13 J. K. Hughes Dev. Co.	692,675
14 Simms Oil Co.	686,716
15 Texas Pacific C. & O. Co.	682,216
16 Rio Bravo Oil Co.	644,702
17 Prairie Oil & Gas Co.	641,005
18 Grayburg Oil Co.	595,255
19 Atlantic Oil Prod. Co.	495,386
20 Roxana Petroleum Corp.	494,868
21 California Co.	425,277
22 Landreth Production Co.	390,760
23 Ryeade Oil Corp.	356,967
24 Marland Oil Co.	313,964
25 Dixon Creek Oil Co.	303,014
26 Empire Gas & Fuel Co.	300,787
27 Roeser & Pendleton	293,401
28 Bridwell & Heydrick	290,008
29 Barkley & Meadows	271,801
30 Sinclair Oil & Gas Co.	269,906
31 Stroube & Stroube	248,407
32 Murchison & Fain	243,957
33 Witherspoon Oil Co.	219,329
34 Petroleum Producers Co.	217,367
35 Mid-Kansas Oil & Gas Co.	216,038
36 Perkins & Cullom	199,877
37 Galena Signal Oil Co.	198,302
38 Barnsdall Oil Co.	197,564
39 Canyon Oil Co.	188,411
40 Pandem Oil Co.	187,609
41 Navarro Oil Co.	182,389
42 Tidal and Tidal Osage Oil Co.	185,639
Total 42 leading companies.	46,684,995
Total all companies	60,899,415

The War-Time Demand

It was said that the Allies rode to victory on a sea of oil and great credit is given the American oil man for having fully supplied the war needs in 1918, the crucial year of the world conflict, but in that year the production of Oklahoma fell to 84,950,000 bbls., notwithstanding the completion of 8,316 wells. A half-year production in 1918 in Oklahoma averaged 42,475,000 bbls. Less than 30 companies out of 1,450 operating in the state in 1926 produced that much crude in the first half of this year.

(Continued on Page 156)

Overcoming Obstacles in the Tropics

Magnificent Work of American Engineers, Backed by American and Canadian Capital and the Colombian Government

In 1920, when the International Petroleum Co., Ltd., committed itself to the task of developing a commercial oil field in Colombia, knowledge of the area acquired outside of its oil possibilities was meager. The concession itself was a wilderness. To the east and south lay upland country, healthful and salubrious, inhabited for generations by a comfortable and more or less prosperous people; but the valley lands, with their steaming temperatures and unbelievable rainfalls, lay tenantless except for the remnants of some more or less hostile Indians. Transportation facilities consisted of river boats and canoes, and the caprices of the Magdalena made river navigation one long struggle against nature.

However, one salient fact stood out in strong relief: the presence of oil had been definitely established. The expenditure of capital on a large scale was necessary to demonstrate the existence of a commercial field. Back in the days of the

Capt. J. W. Flanagan
President Andian National Corp.

Spanish conquest the existence of petroleum had become known, but until the early years of the present century the resource lay neglected. Then into the picture stepped the romantic figure of Roberto De Mares.

Senor De Mares is a French engineer who had made Colombia his adopted country and dealing in concessions his avocation. In the beginning, rubber was the commodity he sought and in that quest he became acquainted with the oil resources of the territory tributary to the Magdalena River. Having satisfied himself of its oil potentialities, Senor De Mares secured from the Colombian Government, in 1905, a concession covering an area which is now a very important part of the oil holdings of the Tropical Oil Co.

De Mares Found the Capital

With the concession, Senor De Mares set out to find capital for development. Partly because he antedated the expansion which took place in the petroleum industry during the war years and also because of the inaccessibility of his proposition, De Mares met only rebuffs for 10 long years. Then, in Pittsburgh, he found a coterie of business men sympathetic to his project. One of these, George W. Crawford, president of the Ohio Fuel Corp., one of the largest natural gas concerns in the world, possessed much pioneering experience in oil. Associated with him were Messrs. Benedum and Trees, whose names have ever been synonymous with daring and adventure in the pursuit of oil. Inaccessibility had no terrors for them and they launched into the Colombian proposition upon the representations made to them by Roberto De Mares. Joining them in the venture came J. S. Weller and John W. Leonard, known throughout the United States where oil men gather. In 1916, under laws of Delaware, they incorporated the Tropical Oil Co., a 2,000,000 share corporation, into which in a very short time they had thrown more than $2,000,000. Their first difficulty was a rather disconcerting one. They found it impossible to obtain drilling equipment. The world was at war and the United States Government had placed an embargo on oil-drilling equipment and casing. Finally, the group discovered what, as a makeshift, would serve their purpose right in Colombia. Another oil company, some time previously, had taken a flyer in Colombian oil possibilities and had tested some coastal territory not far from the point where the product of the De Mares concession is now being delivered. Three rigs still lay on the ground, none of which were particularly complete, but by combining the three, one workable rig was possible. The Tropical acquired the three rigs.

Early Day Difficulties

Then there was the problem of transporting the rigs to the Tropical company's concession. The Infantas structure, as all who have followed the fortunes of International Petroleum know, is 400 miles up the Magdalena River, and 18 miles in the interior from a landing place at Barranca-Bermeja. A side stream flowing into the main river close to Barranca-Bermeja skirts the productive area. To move the drilling equipment up the river was tedious and difficult enough, but to float it up the branch, according to those whose job it was, proved to be the closest to impossible that has ever been accomplished in river navigation.

Delivered by river steamer at Barranca-Bermeja, the drilling rigs were dissected into the smallest possible units, loaded into dug-out canoes equipped with small gas engines and, with the help of expert river men, these crafts were worked up stream until, a piece at a time, there had finally been delivered on the ground a more or less complete drilling rig. After that, it remained to be established whether or not the Tropical Oil Co. had lost its money. The well was finally put down and production proven. Two rotary rigs were shipped from Pittsburgh and delivered on the ground. Each brought in its well. This was the condition when, in 1920, the transaction with the International Petroleum to take over the Tropical Oil Co. was closed.

Four Structures Discovered

The development of the first commercial oil field in Colombia by the Tropical Oil Co. began with the drilling of three wells which, while productive, afforded no evidence of the extent of the oil-bearing area or of its probable production. A geological survey had demonstrated the existence of four structures within a radius of 50 miles. The Infantas structure, which is the one first developed by the Tropical Oil Co., has been since proven to have an area of more than 4,000 acres. One hundred wells have already been completed, with a potential capacity of 70,000 bbls. a day, and, in the judgment of the geologists, this area will permit of the drilling of 300 additional wells without overtaxing the territory. No well has yet reached the bottom of the potential oil horizons. The largest showed a flush production of 9,000 bbls. a day.

Two other structures, the potentialities of which are not yet definitely defined, have been located. La Cira structure, 4 kilometers to the west of Infantas, was proven in 1925 by drilling and there are now five wells in this are averaging 136 bbls. per day. The San Louis structure, 24 kilometers to the southwest, was proven this year. At present there are 16 rotary rigs working in the field with a constant procession of equipment and material going up stream.

At Barranca-Bermeja, 400 miles from the Caribbean Coast, where the jungle has been thrust back to make room for a new industrial community, a modern refinery of 2,000 bbls. daily capacity is in operation, supplying the petroleum requirements in Colombia. The rapid expansion of the Colombian market has demonstrated that the first and chief value of the new oil fields has been to Colombia itself and that the ready availability of a domestic supply of petroleum has proved a very distinct stimulus to Colombian commerce.

To date, bulk stations have been established at Barranquilla, Calamar, Yati, San Bernardino, Puerto Berrio and La Dorada on the Magdalena River, at Cartagena on the Caribbean Coast and distributing stations have been provided at Manzales, Giradot and Medellin in the coffee country as well as at Bogota, the capital. At Barranca-Bermeja the refin-

(Continued on Page 135)

PIPELINE CAPACITY IS BEING ENLARGED

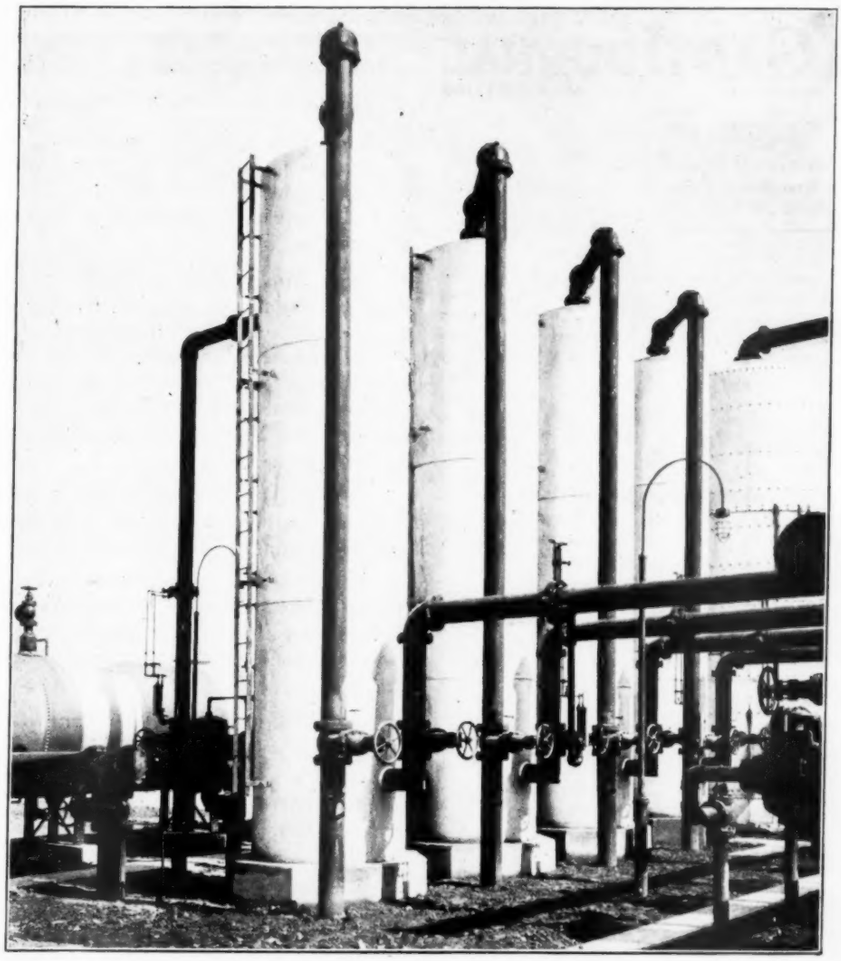
The Andian National Corp. recently announced an extension of its pipeline in Colombia, which is to be an 8-inch loop added to the present 350 miles of 10-inch line. The new work will cost about $6,250,000. The additional capacity is needed, the company states, to take care of the volume of oil now offered for transportation and because of the "rapid increase in the production of crude oil in Colombia."

It was only in July that the original 10-inch line started moving oil from the Tropical company's properties in Colombia; and a little later the first tank steamer with tropical crude arrived at a Standard Oil of New Jersey refinery.

Cinega, in the Yucal Hills.

D. O. Towl
Vice President Andian National Corp.

Reprinted from a more extended article in "The Lamp."



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A DANGEROUS REPORT

The first impression from the report of the Federal Oil Conservation Board is that it shows nothing new about the industry. No sensational findings are made because there was no foundation for them. The industry, as a whole, is acknowledged to have done everything to observe the laws by avoiding agreements even when the inhibition was manifestly inimical. The laws of economy have been observed in the conduct of the business and the industry has held back nothing and contributed everything towards working out a big national problem.

The absence of any sensational criticism of the industry in the report is, moreover, strengthened by the recommendation that hampering laws be rescinded and the oil men of the country be given a freer hand to co-operate in solving the problem of our future oil supply.

So far the report is complimentary and constructive. Unfortunately it did not stop there but went on to make suggestions that are, to say the least, disturbing, if not actually dangerous.

Admitting that "the power of the Federal Government to regulate oil production is doubtless limited to its own oil lands, unless the national defense is imperiled by waste or exhaustion of the oil supply" the board suggests regulation by the states.

The railroads know what that means. Any sort of Federal regulation seemed a relief.

But this suggestion of state regulation of oil production is the more remarkable because of the sort of regulation suggested.

It is based on the assumption, for which there is no warrant in existing law or court decisions, that "the common right of adjoining owners to reduce to possession oil and gas tapped by wells drilled on their lands should involve some recognition of correlated obligations so that in the drawing of oil and gas by one owner from the common reservoir the producers should be required to recognize the right of the neighbor to so much of the oil as is withdrawn from underneath his property."

The neighbor whose land is drained had the liberty to protect himself by drilling on his own plot. To invoke the power of the state to compel a division of the oil where one drilled and the other did not implies a complete overturn of all decisions and practices since the oil industry began.

It sounds more like Moscow than Washington.

Voluntary agreement among owners and producers is, of course, quite another thing. The board well says that "voluntary co-operation offers the only practical hope" and that "the legal inhibition should be removed by appropriate legislation." That is practical and constructive.

State regulation of drilling on the theory of correlated obligations in a common underground supply is, on the contrary, as visionary as distributing the per capita currency in the Federal treasury.

To entertain legislation of that sort it would be necessary to overthrow every practice in the industry and precedent in the courts. It could not be applied to existing operations without impairing the obligations of contracts and taking property without due process of law.

If applied to new operations it would mean two diametrically differing methods within the same industry; an impracticable, if not impossible, complication.

The difficulties of such a situation were very clearly set out by Judge Amos L. Beatty in his address at the American Petroleum Institute meeting in Fort Worth two years ago, an address it may be wished the oil board had digested before making this recommendation.

Speaking of the creation of drilling areas, he said:

"Some of it may be rich, some of it may be poor, and some of it will be worthless. There are numerous landowners. No equitable apportionment of royalties could be made until the pool was exhausted and no fair approximation would be possible until near that stage. And what applies to royalties would also apply to bonuses and rentals. Orators are wont to speak of generations yet unborn and children's children. They mean those who would receive these payments.

"The petroleum industry of this country has developed under our present system. All other branches and divisions are built around the producing business. The producing business as it stands today and as it promises to progress in the future to meet the requirements of our country has its mud sills in the present system. It is too late to talk about changing. One might as well talk of diverting the Colorado River where it runs through the Grand Canyon."

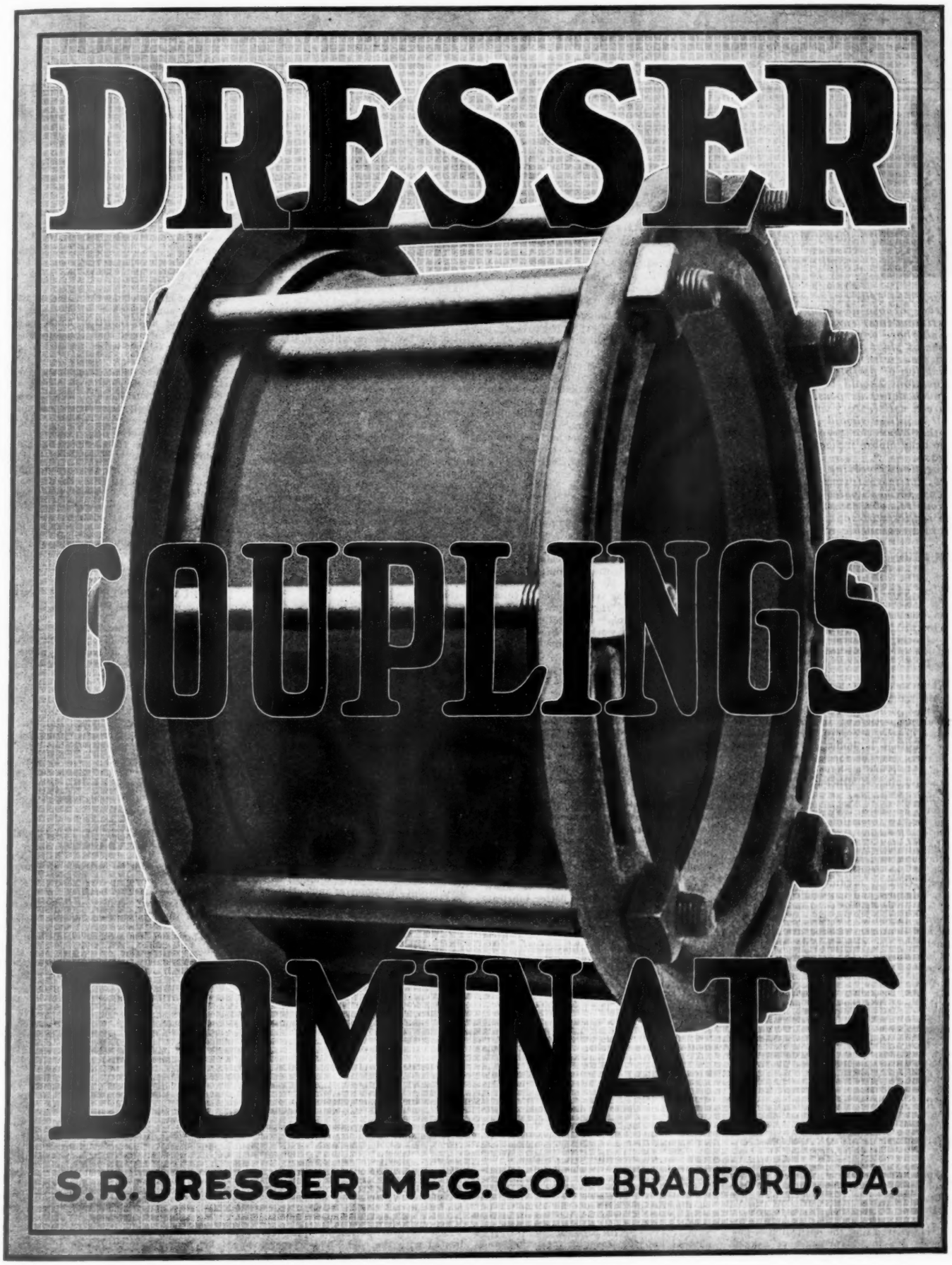
The immediate danger is that state legislatures meeting this winter may accept the invitation of the Federal oil board to attempt some such regulatory legislation as has been suggested. They are much more likely to do that than pay attention to the recommendation to consider legislation authorizing voluntary co-operative agreements.

The board's declaration that "there should be active co-operation between the oil producing states in the study of the proposed legislation to the end that uniform laws be enacted or even agreements or compacts entered into between the states, subject to ratification by Congress" cannot have taken into account the numerous ineffectual conferences between the states on uniform legislation on other subjects. How much less likely is it to be obtained on a political shuttlecock like oil?

Judging by experience, the oil industry has nothing to hope for from state legislatures. The oil board has done it no service by referring the industry's problems to their tender mercies. The effect can hardly escape being mischievious.

How much better it would have been had the board stuck to its declaration that "the major part of the measures that must be taken to protect our future supplies must rest upon the normal commercial initiative of private enterprise."

The report is a curious mixture of sound and practical statesmanship and advocacy of theories out of touch with reality.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Technical Questions Answered

BY CHARLES K. FRANCIS, PH.D., TECHNICAL EDITOR

The Question and Answer Department of The Oil and Gas Journal is devoted to the manufacturing branches of the oil industry.

Those connected with the refining of crude petroleum, the manufacture of natural gasoline and closely allied industries are invited to submit their problems to Dr. C. K. Francis, technical editor. The department was created for the purpose of aiding managers, superintendents, engineers, chemists and all those engaged in the various phases of plant operation; also those connected with the marketing and utilization of petroleum products.

Questions should be submitted in as much detail as possible so as to assure a satisfactory answer.

All inquiries should be signed and if other than the given initials are to be used please indicate the desired letters.

Questions involving patented processes, intricate formulas and calculations and estimates of costs, for obvious reasons, cannot be answered. The replies will appear on this page within a reasonable time.

EMULSIONS WITH LUBRICATING OILS

What class of hydrocarbons existing in a Ranger crude, neutral oil, could cause excessive emulsion on treatment? Why will the increasing of the quantity of acid per barrel tend to increase emulsion in the finished filtered neutral oil?—D. L. W.

While we do not know what kind of organic compounds may be present in this particular crude it is thought that the general properties of the oil from the Ranger district are such that no abnormal condition is indicated. The same substances may be formed in the treating of this crude as have been met with in the refining of others.

From the reports of numerous investigators we learn that favorable conditions for the formation of emulsions include the presence of mineral salts, such as the chlorides and sulphates of lime and magnesium, and alkaline substances because of the tendency to form mineral soaps. Certain organic acids, mercaptans, sulphides and napthenic compounds will aid in producing emulsions. Faulty refining, including the use of too little acid and improper washing are also bad. Sometimes the objectionable substances are introduced in the wash water. The presence of clay and foreign organic matter suggests another source of this trouble. The secondary alcohols, produced by the acid treatment, if not removed during the subsequent steps may promote emulsions.

It is not thought that the addition of more acid to an oil will increase the emulsifying properties. More likely it is the kind of treatment the oil receives after the acid stage. Thorough washing and filtering have been known to reduce the quantity of the emulsion.

DEVELOPMENT OF COLOR IN GASOLINE

What explanation is involved in the discoloration of gasoline which was originally treated to water white color?—W. H. B.

It is believed that the darkening of gasoline is due to the presence of oxygen, to the presence of nitrogen, to a rearrangement of the molecular structure—such as polymerization—to incomplete and to improper treating.

It is known that gasoline from different crudes will, when treated in exactly the same manner, behave quite differently in the tendency to go off color. This fact suggests that there may be certain substances present in one crude which are color formers, and these bodies may be absent or in very much smaller quantities in another crude oil. While many experiments have demonstrated that light acts as a catalytic agent in accelerating the development of the color, it is also true that gasoline and other petroleum products will go off color in the dark.

It must be remembered that gasoline is refined with the expectation that it will be consumed within a short time after it is made. Whatever kind of treatment for purification that may be applied to the unfinished material is for purpose of meeting a marketing condition, which demands a color specification, and it is certain that the refiner does not plan for unreasonable exposure to sunlight or prolonged storage. Gasoline and even lubricating oils may be so treated with acids, alkalies and alcohol, together with filtering mediums that there will be no development of color over several years time. Of course, this kind of treatment is unnecessary and too expensive for the product intended for consumption in a motor.

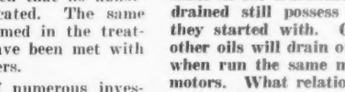
We know some of the conditions under which gasoline will go off color, we are also familiar with the principles of color development in other organic substances, from which we may feel justified in thinking that some of these facts may have a part in the color of gasoline. However, not enough work has been done to warrant definite conclusions.

STABILITY OF LUBRICATING OILS

Some paraffin base oils seem to have the characteristic of running 500 to 600 miles in the crankcase and then on being drained still possess the greenish color they started with. On the other hand, other oils will drain out a tar black color when run the same mileage in the same motors. What relation does this characteristic have to quality? Is there anything in the refining process that might account for the ability of an oil to retain to a greater or less degree, the original color started with before use in the crankcase?—H. J. S.

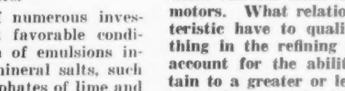
Aside from the fact that we know that some crude produces better lubricating stocks than others, and thus indicate that composition or structure has something to do with it, there is very little definite knowledge on this subject. We have seen a recent statement by the English authority, Prof. J. F. Thorpe, while not conclusive that contains some interesting thoughts about the structure of lubricating oils. He has said:

"At present we know nothing about the structure of the hydrocarbons present in the lubricating oils. Indeed, it seems possible that these may not be long-chain hydrocarbon with which the organic chemist is familiar, but rather polymerized products formed from unsaturated components liable to be formed or destroyed under comparatively mild conditions. The relative ease with which the oil in the engine sump of a motor car loses its oiliness through continued use is not characteristic of the stability usually associated with an organic hydrocarbon. Recent researches on the formation of dimeric products of the simple type



shows that the ease of formation and stability of such systems depend on the composition of X and Y. In some cases stable complexes of this kind are formed which can be distilled without undergoing disruption, but which are broken down slowly on prolonged heating even at a moderate temperature.

In the complex hydrocarbons under discussion the letters X and Y represent hydrocarbon residues, probably themselves containing other unsaturated linkages, and under the conditions of high pressure which were probably present during the formation of natural petroleum it is possible many of these four-membered rings are formed in a single molecule, for example:—



an expression which, incidentally, indicates the manner in which the cyclohexane complex can also be produced by a similar process. So far as the chemistry of production is concerned this is at present mere surmise, which must be investigated as soon as practicable. The view is, however, rendered plausible by the work which has been carried out at the Imperial College during the past five years, which shows conclusively that the formation and stability of ring systems depend on the character of the groups attached to the carbon atoms forming the rings, and is not merely dependent, as Baeyer supposed, on the tetrahedral angle of the carbon atoms involved. It is probable also that a similar explanation may account for the "naphthenes," and will provide a general explanation of polymerization and depolymerization upon which it will be possible to base improved technical processes."

DISTILLATION TEST TEMPERATURES

Kindly explain the significance of the apparent and true temperatures in the following: The August issue of the Journal of Industrial Chemistry contains an article by E. H. Leslie in which he states—"Cutting at 450 degrees Fahrenheit vapor temperature in the standard column apparatus results in a gasoline product of approximately Federal Specification endpoint—that is 437 degrees Fahrenheit apparent temperature of 444 degrees Fahrenheit true temperature."—L. F. H.

The A. S. T. M. thermometer specified for the distillation test is a total immersion instrument, so, although different thermometers may vary, the true temperature corresponding to an A. S. T. M. distillation thermometer indication of 437 degrees Fahrenheit is about 444 degrees Fahrenheit. As an appreciable portion of the thermometer stem is outside of the vapor zone, allowance should be made for this if a true temperature is desired. All temperatures read from the A. S. T. M. distillation thermometer are apparent temperatures and not actual temperatures. Of course they are perfectly acceptable temperatures when the A. S. T. M. method is the one included in a given specification.

OIL FROM SHALE OR FROM COAL

Is it true that the commercial possibilities for the production of oil from shale are not so favorable as from coal? What are the principal reasons for this?—H. D. L.

Much attention has been devoted to processes for the manufacture of oil and other products from coal. These have included low and high temperature carbonization with and without pressure; then there are also additional ones in which certain petroleum products are heated with the coal. This research has been more extensive than that devoted to shale as a possible source of oil. Many of our present-day refining methods owe their origin to the shale oil industry, which was established before we knew much about petroleum.

The expense of mining, handling, retorting and refining is high in the shale industry. The oil is the only valuable product while the residue from the retorts constitutes a troublesome waste. When similar methods are applied to coal there is practically no waste, for the carbonized residue is a valuable product for which there is a ready market especially when subjected to the briquetting process.

E. de Hautpick in the London Mining Journal suggests that while the expense of mining and retorting shale may be less than for coal that the difference in the total selling value of the products is so much in favor of the coal that it is by far the most promising. Where large deposits of shale are located at or close to the surface and remote from a petroleum supply there may be some opportunity to operate a shale plant at a profit. He believes that a sufficient supply of petroleum from wells will be available beyond the time when science will limit the demand for petroleum products by developing more efficient use or will displace its use as a source of power, etc., by the utilization of a new material. Improved methods of drilling and better recoveries, production possibly far below our present producing sands will make available supplies of crude oil sufficient for the demand of years to come.

PUMP CONSTRUCTION AND PUMPING PRINCIPLES

Will you give me the names of a few books which treat of the construction of pumps and give information about the essential principles of pumping?—M. S. E.

You will find the following very good. "Direct Acting Steam Pumps," by F. F. Nickel; "Pumping Machinery," by William N. Barr; "Modern Pumping Machinery," by E. Butler; "Pumping Machinery," by Arthur M. Green; "Centrifugal Pumps," by R. L. Daugherty.

Many of the manufacturers of pumps publish handbooks on this subject and will be glad to furnish copies to anyone interested.

HORSEPOWER IN TERMS OF HEAT UNITS

Is it possible to estimate the approximate horsepower that may be developed in a boiler if the heating value of the fuel is known? Will you show the formula, if there is one?—C. D. P.

There are some other conditions which should be known but as a very rough estimate such a calculation may be made. After water has been heated to the boiling point, 212 degrees Fahrenheit, it requires 970.4 B.t.u. to change one pound of water into steam. The common constant used for the purpose of calculating boiler efficiencies is that the evaporation of 34.5 pounds of water at 212 degrees Fahrenheit will produce steam equivalent to 1 horsepower. Therefore, 970.4 multiplied by 34.5 gives 33.479 B.t.u. as the heat equivalent of 1 horsepower.

Of course, it is not possible to have combustion proceed under such conditions that there will be complete transfer of the energy. The combustion itself is seldom in balance, there is usually an actual residue or some material carried away before there has been contact with enough oxygen for complete combustion. There are additional losses in transfer and radiation. Because of these facts allowance must be made for expected efficiency of any still or boiler, and this deduction may vary from 20 to 60 per cent.

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Seminole Pool Offers New Sensation

Amerada-Gardner Well Finds Wilcox Sand, Throwing Open Region That Will Surpass Cromwell Field in Area

The sensational news came from the Seminole Pool in Seminole County, Oklahoma, when the Amerada Petroleum Corp. and the Gardner Petroleum Co.'s No. 1, SE cor. SW NE, Section 23-9-6, found the Wilcox sand at 4,128 feet and penetrated it to 4,133 feet. The well started flowing at the rate of 115 bbls. an hour and for the first seven hours continued at that rate. At 4,145 feet the well gauged 290 bbls. an hour.

Discovery of oil in the Wilcox sand in this location throws wide open for drilling a region which will surpass the Cromwell Field in area. With production proven for 1 mile north and south, and three quarters of a mile east and west, dozens of new locations will be made. There are already 130 active operations in this section, and within a week it is very likely that this figure will be swelled to 200.

The Independent-Garland discovery well in the Seminole Pool increased from 5,400 to 7,935 bbls. The eastern part of Muskogee County came forward with a well starting at 48 bbls. an hour. The northwest extension of the Tonkawa deep sand pool had a well of the Blackwell company flowing 45 bbls. of oil and 30 bbls. of water hourly.

The discovery of oil in Jones County, west of Shackelford County, Texas, by the Phillips Petroleum Co. was the new development of the week. It flowed 400 bbls. through 60 feet of caving at 2,510 feet, between Thursday and Saturday.

In the Texas Panhandle production mounted to nearly 118,000 bbls. from 414 producing wells. Showings in several wildcats indicated an extension of the producing limits far beyond present limits.

The Randado Field in southwest Texas was extended three quarters of a mile north by a well swabbing at the rate of 500 bbls. a day.

Spindletop declined to 84,000 bbls. on Monday morning, the previous week's average having been 93,000 bbls. against over 103,000 bbls. the week before. Two good wells were found in the light oil section of Sour Lake.

The test in the heart of the Haynesville Field, Louisiana, which gave hope of Trinity sand production, is looking more promising.

The Skelly Oil Co. well, 5 miles west of the Maljamar Pool, is credited with being probably the best well there in eastern New Mexico, flowing by heads 150 bbls.

The southwest extension of Huntington Beach, in California, has had several wells which failed to pick up the Superior sand and it is now thought it may not be prolific. Town lot drilling will depend upon the productivity of deep tests.

OKLAHOMA

For the 24 hours ending Tuesday morning of this week, the Seminole Pool produced 17,716 bbls. from 25 wells excluding the production of the Amerada-Gardner well.

The farthest southeast well in the South Braman Pool is the Wentz Oil Corp.'s No. 1 Andrews, NW cor. NE, Section 8-28-1w, which found the Wilcox sand at 3,453 feet with 150 feet of water in the hole. Sandy lime was found at 3,475-79 feet, and the pay was touched at 3,494 feet. The well started flowing 30 bbls. an hour and it is pinched in pending the erection of tankage.

The Industrial Oil & Gas Co.'s No. 1, SW cor. NE NE, Section 13-20-9, had 8,000,000 feet of gas in sand 2,400-01 feet, and sand at 2,710-20 feet yielded 160 bbls. the first day. The well is shut down waiting for the completion of tanks.

KANSAS

The Cassoday Oil Co.'s No.1 Yoeman, C SE Section 25-28-7w in Kingman County, Kansas, had a showing of oil at 4,049 feet and the well is shut down for orders.

In Greenwood County, The Texas Company and others' No. 1 Edwards, SW cor. NE SW, Section 16-23-11, made 500 bbls. after a shot of 140 quarts in sand at 1,917-67 feet.

GULF COAST

HOUSTON, Tex., Sept. 14.—The Gulf Production Co. completed No. 21 Davis in the Big Creek Pool, Fort Bend County, at 3,560 feet, flowing 1,600 bbls. The Gulf company has all the available acreage there, just as the Rycade company has at the Nash Dome, to the northwest and the Gulf company around the Orchard Dome, also in Fort Bend County. The Big Creek Pool is 10 miles south of Richmond, the county seat.

The production in the Spindletop Pool at the close of the week was divided as follows:

	Barrels
Yount Lee Oil Co.	39,200
Gulf Production Co.	31,925
Rio Bravo Oil Co.	10,300
Atlantic Oil Producing Co.	9,000
Sun Co.	670
Paggi Oil	550
Unity Oil	1,500
Total	93,145

SOUTHWEST TEXAS

SAN ANTONIO, Tex., Sept. 13.—Laredo district added 1,250 bbls. to its flush production and 96,000,000 feet to the gas production the past week with the completion of nine oil wells and four gas wells and registered five failures some of which were wildcats.

In the Carolina-Texas Field The Texas Company's Nos. 2 and 3 Webster each came in making about 8,000,000 feet of gas. No. 2 is an east offset and No. 3 a north offset to the Associated-Carson No. D-1, a dry hole which is an east offset to their No. D-2, which is the discovery oil well and the only one completed in the field thus far. The Texas Company's No. 1, a north offset to the discovery well, was completed recently and is a small gas well.

Houston Oil Co.'s No. 1 Barnsley on Block 15 of Survey 268 which is considerably north and in the gas area came in a 50,000,000-foot gas well. S. O. M. Oil C. abandoned at 2,609 feet its No. 1 Webster which is nearly a west offset to the Associated-Carson discovery well. Total depth of The Texas Company's No. 2 is 2,605 feet and of No. 3 2,614 feet.

The Randado Field records the completion of M. J. Bashara's No. 1 Weil on Block 8 of Survey 81 and Shankle & Kori's No. 1 Weil on Block 9 of Survey 81 estimated at 250 to 300 bbls. each and resulting in a three-quarter mile extension of the field to the north. Magnolia completed Nos. 10 and 11 on Block 6 of Survey 291 in the Randado Field the first a 75 and the second a 60-bbl. well. Andrews Petroleum Co. abandoned at 1,268 feet its No. 1 Palacious.

K. & S. Corp. completed No. 28 Holben in Block 6, Survey 11, making 30,000,000 feet of gas.

In the Bruni tract extension of the Mirando Field the Associated Oil Co. completed No. 3 Bruni on the south half of Survey 44 at 1,687 to 1,696 feet estimated at 300 bbls. That part of the field had been all but condemned and the well is therefore of unusual importance.

Staley & Wynne in the Bruni extension completed No. 18 Bruni in the west half of Block 18 at 1,717 to 1,722 feet, estimated at 100 bbls. and Ruthada Oil Co. completed No. 6 Bruni on the east half of Block 18 at 1,727 to 1,731 feet estimated at 75 bbls. Ball abandoned at 1,850 feet his No. 1 Puig on Block 67.

In the Mid-Ojuelos Field Alonzo Oil Co. completed No. 7 Garcia in Survey 605 at 1,658 to 1,666 feet estimated at 50 bbls. Murchison & Fain completed No. 1 Garcia in Survey 58 in a sand at 1,551 to 1,573 feet, estimated at 40 bbls.

In the Cole Field Cole Petroleum Co. abandoned at 3,924 feet its No. 25 Benavides testing salt water.

PANHANDLE AND WEST TEXAS

FORT WORTH, Tex., Sept. 14.—Roxana Petroleum Corp.'s No. 1 Bryan, C NE, Section 92, Block 4, Carson County, 11 miles east of production and 7 miles east of the Marland Oil Co.'s No. 1-B flowed 50 bbls. hourly for 2 hours from sandy lime at 3,174-78 feet. It was then shut in on account of insufficient storage. The Phillips Petroleum Co.'s No. 1 Winters, in Jones County, was deepened 6 feet to 2,516 feet and is now in lime and flowing 150 to 200 bbls. with 200,000 feet of gas. The Phillips Petroleum Co. is building a loading rack near Merkel.

In Upton County, the Gulf Production Co.'s No. 1 Shirk-D, offsetting the northeast corner of Marland's Burleson lease, filled up 200 feet in one hour at 2,206-07 feet and was shut down pending the erecting of storage. The Independent Oil & Gas Co.'s No. 2 Burleson flowed 1,268 bbls. in the first 24 hours.

This well is on the T. C. Jones Survey and not the William Teel Survey, as elsewhere given. The Dixie Oil Co.'s No. 7 Burleson, west offset to the Independent's No. 2 Burleson, had 1,500 feet of oil in the hole and was drilling at 2,251 feet.

Phillips Petroleum Co.'s No. 1 Winter, in Jones County, is reported flowing 900 bbls. at 2,518 feet, total depth. The Marland Oil Co. has made seven locations on the west offset 80 acres, five to be drilled immediately if the well holds up.

TEXAS CO. BUYS LEWIS OIL

Following negotiations extending over several months, The Texas Company has purchased the properties of the Lewis Oil Co. of Tulsa, Okla., for a price which is understood to be $3,000,000 cash.

The Lewis Oil Co. properties consisted of 740 bbls. daily production in Oklahoma, and 2,300 bbls. daily in Kansas, and some small production in the north Texas fields. The company also owns two gasoline plants in the southern Kansas fields.

COURT VOIDS GILLILAND SALE

FORT WORTH, Tex., Sept. 11.—The sale of the Gilliland Oil Co.'s property to the McMan Oil & Gas Co. has been set aside, according to a decision of Federal District Judge James C. Wilson sent here from Colorado for transcription by Federal Court Reporter James A. Feagin. The decision orders the return of the property to the Gilliland interests and the return of $1,000,000 consideration paid for the property to the McCan interests, purchasers; in other words, the cancellation of a sale of property valued at $5,000,000. This sale has been contested by the Gilliland interests for five years, losses starting in Wichita Falls. Judge Wilson, who has been vacationing in Colorado, is expected to return to Fort Worth Saturday.

FATALLY BURNED ON LEASE

V. C. Cherry, roustabout for the Barnsdall Oil Co. on one of its leases in Seminole County, Oklahoma, was fatally burned following a gas explosion at a well on Sunday. J. Mancell, driller, who attempted to tear off Cherry's burning clothing, was badly burned, but will recover.

CALVIN N. PAYNE DIES AFTER HALF CENTURY OF LEADERSHIP

ERIE, Pa., Sept. 14.—Calvin N. Payne, one of the grand old men of the oil and gas industry, died in Erie, Pa., Monday, September 13, aged 81 years.

Mr. Payne was born in Irvineton, Pa., May 25, 1844. Sixteen years later he was on Oil Creek taking a very active part in the very early development in that, the only oil field in the country. In 1863 he was employed in a commission house at Irvineton which handled oil and freight between the Allegheny River and the railroad, quitting the job for a season of railroading on the old Philadelphia & Erie. In 1865 he returned to the oil country and took a contract to drill a deep well—1,000 feet. Two years of contracting put him in a position financially where he could go into the producing business. In 1866 he married Miss Mattie Dempsey of Erie, Pa., and they moved to Petroleum Center, then a booming oil town, and there he constructed and managed the Payne & McCray pipeline. In the next few years he became known as a very successful operator in several fields and also was engaged in the business of buying and selling woods or field oil, which naturally led to his connection with the several oil exchanges started in the seventies, where he became known as a heavy trader. Mr. Payne suffered heavy losses in the panic growing out of the Grant & Ward failure, but he got on his feet again after paying all his obligations in full.

In 1885 he joined the Standard Oil Co. and was given the responsibility of building up that organization's growing natural gas business. He was president, or general manager, of a number of Standard gas companies and in addition became general manager of the National Transit Co., second vice president and general manager of the Buckeye, the Eureka and the Southwest Penn Pipe Line companies. In 1888 he organized the Metric Metal Co. of Erie, Pa. Later he organized the Lone Star Gas Co. of Texas.

Christy Payne, who is at the head of all the Standard Oil Co. natural gas interests, and Frank H. Payne, president and general manager of the Metric Metal Works in Erie, are sons of the deceased.

For nearly half a century Calvin N. Payne figured prominently as one of the great constructive figures in the upbuilding of the American petroleum and natural gas structures. He was particularly prominent in the natural gas and the oil transportation branches of the industry and retired only when ill health compelled him to cut loose from active responsibilities.

Panhandle Production Near 118,000

Producing Area Being Extended. Effort to Shut Down Wells. Tank Building Is Relieving Storage Situation

By C. D. Lockwood
Staff Correspondent, Texas Panhandle

While the tide of stored crude in the Texas Panhandle was steadily mounting during the past week, several good wells were completed and the daily average production reached a new high mark of nearly 118,000 bbls. from 414 producing wells. Showings in a number of semi-wildcats also indicated that the producing area will extend far beyond its present limits and lease buyers for some of the large companies were active in counties far from the proven district.

The completion of the Prairie Oil & Gas Co.'s new line from the Hutchinson County Field to Kings Mill and the Humble's line to Lela, on the Rock Island, were events of the week which will aid the storage situation materially, and the completion of numerous steel tanks by various companies will also help. But the general situation seems to be steadily getting worse in spite of that, and the number of shut-down wells will probably continue to increase. There were 85 wells shut down this week for various reasons, most of them for pipeline, however. There were 565 rigs and wells drilling in the Panhandle at the close of last week, 362 of them in Hutchinson County and there were 22 new locations, 14 of which were in Hutchinson County.

Shut-Down Wells

A concerted effort is being made by a few of the larger producers in the field to effect a general shutdown of drilling wells as they reach the sand. The Gulf Production Co. has been a leader in this movement for the past two weeks or more and the Phillips Petroleum Co., Midwest Exploration Co., Prairie Oil & Gas Co., and others are agreeable to such a plan. These companies are shutting down their wells wherever concerns offsetting them will agree to do the same and the Gulf has practically shut down all of its pumping and swabbing wells.

The Derby Oil Co.'s No. 1 Johnson, in the NE cor. SW of Section 20, Block Y, was one of the best completions of the week. It was shot with 140 quarts at 2,955-3,023 feet and flowed 1,000 bbls.

The Marland Oil Co.'s No. 1 State of Texas, in the Canadian River bed, is making 10,000,000 feet of gas while drilling at 2,410 feet. It topped this gas at 2,245 feet where the volume was about 4,000,000 feet. The elevation of this well is 2,795 feet and top of lime was at 1,785 feet.

Tank Building

The storage difficulties are rapidly being cleared up as the tank building program of various large companies nears completion. The Gulf Production Co. will have 2,720,000 bbls. of storage space when the tanks now contracted for are erected. Four of the 80,000-bbl. tanks are north of the river and the remainder east of Panhandle, where the company now has six and is building or going to construct 24 additional 80s.

The McMan Oil & Gas Co. plans to build ten 55,000-bbl. tanks in Section 68, Block 46; the Empire Gas & Fuel Co. is building a 55,000-bbl. tank in Section 21, Block Y, and The Texas Company is constructing three 55s at its Kings Mill tank farm. The Magnolia Petroleum Co. is also adding 10 new 55,000-bbl. tanks to the 20 which it has at Kings Mill and plans to have all of them completed within a month.

Marland pipeline shipments during August from the Panhandle loading rack amounted to 810,365 bbls., which were shipped in 3,371 cars. Phillips Petroleum Co.'s shipments during the last half of August were 58,609 bbls. in 264 cars. Magnolia Petroleum Co.'s daily runs to Kings Mill tank farm the first week in September were approximately 98,000 bbls. Humble Oil & Refining Co.'s shipments from August 21 to 30, were 10,994 bbls.

Total production of the Phillips Petroleum Co. in the Texas Panhandle from the beginning to September 1 was 1,430,000 bbls.

Three new pipelines started running oil in the Panhandle during the past week. The Prairie Oil & Gas Co. started filling its 8-inch welded line from the Hutchinson County Field to Kings Mill tank farm; the Humble Oil & Refining Co. started oil through its 4-inch extension line from Pampa to Lela on the Rock Island, and the Atlantic Oil Producing Co. made its first run September 8 from Gray County.

Roxana Petroleum Corp. is purchasing a site in the west half of Section 13, Block Y, for a 26-car loading rack, and W. G. Campbell has bought a 13-acre site in Section 128, Block 3, I. & G. N. Survey, Gray County, for a 40-car gasoline loading rack.

New Lease Deals

Several lease deals of considerable magnitude were consummated recently. In Gray County, the Humble Oil & Refining Co. paid $35,000 cash for the southwest quarter of Section 112, Block 3, half a mile east of the Empire Gas & Fuel Co.'s No. 1 Hughey, which is drilling below 2,500 feet. This lease has 8 years to run. The Empire also bought Section 180, Block B-2, for $100 an acre. It is a 5-year lease and carries a $1 rental. This is a small section containing about 320 acres and is located about 1½ miles northwest of the Bay Shore Petroleum Co.'s No. 1 Bradford, which is making 165,000,000 feet of gas.

One of the largest recent lease deals was that of the Midwest Exploration Co. in purchasing the north half of the southwest quarter of Section 13, Block Y, Hutchinson County, for $75,000 in cash and $175,000 in oil. This property has been in litigation for some time and five offset wells to it are now producing. The Midwest agreed to start six wells immediately.

On the Texas-New Mexico line, just east of Glenrio, N. Mex., but in Oldham County, Texas Panhandle, the Landergin Ranch, containing approximately 100,000 acres, is reported to have been leased to the Prairie Oil & Gas Co. although the consideration is unknown. The California Co. also bought the south half of Section 51 and all of Section 56 in Block S. C. & S. S. Survey, Dallam County, for $2.50 an acre, being 5-year lease with 50-cent rentals, and also purchased Sections 53 and 55 and all of Section 52 except the east half of the northwest quarter for an unknown consideration. The latter leases are for 10 years and carry $1 rental.

In Moore County, the Mid-Continent Petroleum Corp. has been active, paying $50 an acre for 10-year leases on the N half SE of Section 113, Block 44. This is just west of the Douglas Oil Co.'s test, No. 1 Beauchamp. This company also bought the S half SW, Section 231, Block 3-T, same county, for $13.50 an acre and purchased two 80-acre tracts three-quarters of a mile from the Flowers and Marland Oil Co. test. The Amerada Petroleum Corp. also did some buying in Moore County, getting the east half of Section 133, Block 3-T, and most of Section 100, same block, for $5 an acre, 5-year leases with $1 rental. These leases are near the north line of Moore County.

Another Moore County test is being planned by E. O. McDowal. It will probably be located in one of Sections 15, 16, 17 and 18, A. B. & M. Survey.

The Mid-Continent Petroleum Corp. spent $35 an acre for the S half SE and NE SE, Section 4, Block 44, Hartley County, 10-year leases.

Texas Panhandle Completions

Hutchinson County

Alaska Petroleum Co.'s No. 1 E. Cockrell, Section 2, Block B-3, was flowing 40 bbls. from pay topped at 2,990 feet, while drilling at 3,035 feet. Amerada Petroleum Corp.'s No. 2 G. A. Whittenburg, Section 20, Block 47, had pay at 2,970-3,000 feet and was shot with 50 quarts at 2,950-3,000 feet, making 105 bbls. Amatex Oil Co. abandoned the location for No. 1 Cockrell, in the NW cor. SE NW of Section 2, Block B-3. Badger Oil Co.'s No. 2 Tom Lewis, in Section 5, Block M-23, was shot with 180 quarts at 2,889-3,000 feet and shot off the shoe joint. It made a 50-bbl. flow.

Canyon Oil & Gas Co.'s No. 5 J. A. Whittenburg, in Section 12, Block Y, was flowing 1,600 bbls. at 2,710-16 feet. Echo Oil Co.'s No. 3 Smith, in Section 13, Block Y, was flowing 350 bbls. natural at 2,760-61 feet and was shut down for pipeline; No. 4 was flowing 75 bbls. at 2,740-42 feet and was likewise waiting on pipeline. Fly-Blackburn Oil Co.'s No. 2 J. F. Weatherly, in Section 19, Block Y, made 50 bbls. at 2,921-70 feet but was not completed.

Goldelline Oil Co.'s No. 2 J. A. Whittenburg made 100 bbls. natural at 2,921-66 feet. This well is in the NW cor. of Section 27, Block 47. Gulf Production Co.'s No. 21 Dial, in Section 1, Block XO2, flowed 1,590 bbls. from pay at 2,875-95 feet. Inspiration Oil Co.'s No 1 Thompson, in Section 4, Block M-18 was abandoned as a failure at 3,251 feet. J. K. Hughes Development Co.'s No. 2 W. L. Kingsland-B, in Section 6, Block B-4, was shot with 320 quarts at 2,895-2,924 feet and made 75 bbls. afterward.

Madden and others' No. 1 Harvey, in the SW cor. of their 1,600-acre block in Section 5, Block L, E. L. & R. R. Survey, was plugged as a duster at 3,016 feet.

Marland Oil Co.'s No. 1 Burnett-D, in Section 128, Block 5, was also abandoned as dry at 3,113 feet. The same company's No. 5 Perkins-Dial in Section 1, Block XO2, was shot with 40 quarts at 2,799-2,811 feet, pay at 2,796-2,811 feet, and flowed 800 bbls. afterward; No. 1 Perkins-Dial-A, Section 16, Block XO2, made 90 bbls. in the first 10 hours after a 60-quart shot at 2,980-3,050 feet; No. 4 J. F. Weatherly-A, Section 19, Block Y, was a 50-bbl. well after a 140-quart shot at 3,000-38 feet; No. 1 J. F. Weatherly-C, same section, was good for 120 bbls. when shot with 100 quarts at 2,970-3,039 feet; No. 2-C made 65 bbls. after a 60-quart shot at 2,960-3,020 feet, total depth 3,040 feet; No. 3-C was shot with 60 quarts at 2,976-3,000 feet and made 50 bbls. Total depth is 3,025 feet.

S. D. & W. W. McIlroy's No. 7 Smith, in the NW of Section 14, Block Y, was flowing 65 bbls. at 2,857-2,971 feet. J. R. Phillips and Heywood's No. 2 Smith, in Section 14, Block Y, flowed 200 bbls. at 2,910-95 feet.

Phillips Petroleum Co.'s No. 1 Whittenburg-Haines, in the Caperton & Williams subdivision of the Mary Whitley Survey, flowed 200 bbls. at 2,918-65 feet; No. 2 flowed 100 bbls. at 2,915-24 feet. Prairie Oil & Gas Co.'s No. 5 Johnson-A in Section 64, Block 46, was shot with 80 quarts at 2,858-90 feet, total depth 2,904 feet and it bridged. While cleaning out it flowed 120 bbls.; No. 9 Johnson-A, in Section 20, Block Y, flowed 500 bbls. natural at 2,960-3,040 feet.

Sinclair Oil & Gas Co.'s No. 1 J. L. Williams was making 1,000,000 feet of gas at 2,240 feet and was shut down at 2,260 feet. This is a wildcat in Section 43, Block 47. J. L. Smith's No. 2 Smith, in Section 7, Block Y, was flowing 75 bbls. natural at 2,875-2,926 feet. Triangle Oil Co.'s No. 2 Smith, in Section 5, Block Y, was shot with 60 quarts at 2,750-70 feet and was flowing 4,000 bbls., 10 per cent of which is water.

Carson County

American Refining Co.'s No. 9 Burnett estate, in Section 115, Block 5,

(Continued on Page 155)

PEAK OF PRODUCTION MAY HAVE BEEN PASSED IN NIGGER CREEK

By Special Correspondent

MEXIA, Tex., Sept. 13.—An inspection of the Nigger Creek Field in Limestone County, gives rise to the belief that the peak of production has been passed. For the 24 hours ending this morning at 7 a. m., the production of the field was:

	Bbls.
Atlantic Oil Production Co.—	
Nos. 1 and 2 Rosson	250
Barkley & Meadows—	
No. 1 Rosson	201
Godley Oil Co.—	
Nos. 1, 2 and 3 Rosson	885
No. 1-A Rosson	1,010
Moss & Keeling—	
Nos. 1 and 2 Rosson	2,025
Murchison & Fain—	
No. 1 Bennet	197
No. 1 Holton	124
Shaffer and others—	
No. 1 Rosson	330
Simms Oil Co.—	
No. 1 Rosson	312
E. L. Smith Oil Co.—	
No. 1 Rosson	815
Transcontinental Oil Co.—	
Nos. 1, 3 and 4 Atkins	520
No. 1 Cochrun	dead
Nos. 1, 2, 3 and 4 Cogdell	3,450
No. 1 Erskine	325
No. 1 Medlock	1,143
Nos. 1 and 4 Rosson	1,266
No. 2 Rosson	347
No. 1-A Rosson	125
Nos. 2-A and 8-A Rosson	535
Nos. 4-A, 5-A and 11-A Rosson	885
Nos. 3, 5, 6, 7 and 9 Rosson	2,400
Total, 38 wells	17,145

This figure gives the total amount of fluid produced. As almost all of the wells are making water and b.s., accurate figures on the amount of oil produced are impossible until the monthly reports are available. Estimates on the amount of water and b.s. produced with the oil vary from 10 per cent to 40 per cent, and most of the conservative operators believe the fluid will average 30 per cent water and b.s.

All of the wells completed during the past week were inside wells which failed to extend the borders of the pool. The disappointing results from the additional completions are the chief influence in forming the opinion that the peak of slightly better than 20,000 bbls. attained 10 days ago will not be touched again.

For some time it was thought that another fault line pool such as Mexia or Wortham might be uncovered, but subsequent events have resulted in the abandonment of this theory. There were no new wells started during the past week, and within 10 days all the wells now drilling should reach the sand, and unless some sensational results be obtained from these wells, the Nigger Creek Field will be a matter of history.

Jones County, Texas, Joins Producers

Independent Co.'s No. 2 Burleson in West Texas Flows 700 Barrels in Ten Hours, Making 3 Per Cent Water

By C. D. Lockwood
Staff Correspondent, North Texas Fields

FORT WORTH, Tex., Sept. 13.—The discovery of oil in Jones County, which is the county lying to the west of Shackelford, was the surprise of the year in north Texas. It was offered by the Phillips Petroleum Co., one of the most aggressive concerns in the Lone Star State, as convincing proof that oil is where you find it and that no wildcat can be condemned, even though this particular one which was started on geological recommendation was drilled on a small nose. Prospects of finding production in Jones County excited very little enthusiasm in any of the Texas concerns, and, aside from the Phillips Petroleum Co., only the Marland Oil Co. has any acreage around the new find, which is No. 1 Joe Winter in the SW cor. NW of Section 19, Block 19, T. & P. Survey, in the southwestern corner of the county. This acreage is a spread which the owners traded for a similar spread around the Marland Oil Co.'s No. 1 Cox in the southeastern part of the county.

This well was drilled into the pay on Labor Day and immediately shut down with the bit supposedly only a few inches in the formation at 2,510 feet. There was about 60 feet of cavings in the hole and the well flowed by heads through these cavings, making approximately 400 bbls. from last Thursday to Sunday, so the owners are justified in believing they have a real find. Five 500-bbl. tanks are being built and it will probably be the middle of the week or later before the well is deepened.

West Texas Gusher

While the industry was waiting for word regarding the deepening of this well, the Independent Oil & Gas Co. got busy in west Texas again and brought in another gusher. The new one is No. 2 Burleson, in the NW cor. of the Independent's 80 acres in Section 100, William Teel Survey, north of the Marland Oil Co.'s 480-acre Burleson tract and about 3 miles southeast of the Independent's Wooley property. No. 2 Burleson came in Sunday at 2,308 feet and flowed 700 bbls. in the first 10 hours, with 3 per cent water and no b.s. This well is about 100 feet lower than the producers a quarter of a mile south and tends to show that the structure is relatively narrow compared to its length. The Roxana Petroleum Corp. also has a good well in the Dixie-Hughes area. It is No. 1 Hughes, offsetting the Humble Oil & Refining Co.'s No. 1 Ricker & Dodson, and flowed by heads every three hours, making 250 bbls. in six hours Sunday at total depth of 2,161 feet. The Humble's Ricker well started out like a good producer early last week, flowing 15 bbls. an hour at 2,160-82 feet through a ⅜-inch choke, but went dead and swabbed 200 bbls. in 12 hours.

NORTH CENTRAL TEXAS
Estimated Production Week Ending September 11, 1926

Ranger district—	This Week	Last Week
Brown County	12,091	12,674
Callahan County	4,574	4,568
Coleman County	1,737	1,805
Comanche County	1,810	1,837
Palo Pinto County	437	439
Ranger County	5,495	5,693
Shackelford County	10,660	10,911
Stephens County	11,092	11,375
Total Ranger district	47,896	49,302
Wichita Falls district—		
Electra	16,694	15,972
Burkburnett	11,923	12,137
Iowa Park	4,273	4,224
Archer County	31,405	30,061
Clay County	581	562
Wilbarger County	14,429	14,474
Montague County	7,279	6,787
Young County	8,224	8,205
Jack County	240	220
Throckmorton County	1,480	1,686
Baylor County	152	158
Cooke County	270	277
Total Wichita Falls district	96,950	94,763
West Texas district—		
Big Lake Field	28,912	28,439
Crane County	435	775
Crockett County	1,366	1,211
Howard County	222	233
Mitchell County	3,545	3,636
Scurry County	37	43
Upton County	7,804	6,433
Total West district	42,321	40,770
Grand total	187,167	184,835
Increase	2,332	

West Texas Completions

Crane County

Independent Oil & Gas Co.'s No. 4 Len Taylor flowed 400 bbls. at 2,026-46 feet. The Texas Company's No. 2 King swabbed 100 bbls. at 2,301 55 feet and was preparing to shoot.

Culberson County

Deep Rock Oil Co.'s No. 1 Kloh & Rumsey was dry and abandoned at 3,507 feet.

Ector County

Henry Zweifel and others' No. 1 Johnson was being plugged at 3,603 feet.

Midland County

Rook & Zimmerman's No. 1 Hill will probably be plugged at 3,715 feet.

Reagan County

Big Lake Oil Co.'s No. 78 University flowed 214 bbls. at 2,896-2,929 feet; No. 81 flowed 818 bbls. at 2,856-78 feet. Texon Oil & Land Co.'s No. 1-A University, Group 1, flowed 600 bbls. at 2,909-53 feet.

Upton County

Independent Oil & Gas Co.'s No. 2 Emma Wooley topped the first pay at 2,034 feet and the second at 2,160 feet, making an estimated 4,800 bbls. initially 22 per cent water. It came in September 4 and was flowing 618 bbls. pipeline oil September 13.

Marland Oil Co.'s No. 9 Burleson pumped 46 bbls. at 2,112-53 feet; No. 13 pumped 40 bbls. at 2,120-40 feet; No. 14 pumped 180 bbls. at 2,132-65 feet; No. 19 was shot with 200 quarts at 2,110 74 feet, top of pay 2,107 feet, and swabbed 100 bbls.; No. 20 was shot with 240 quarts at 2,125-80 feet and was swabbing 60 bbls. Roxana Petroleum Corp.'s No. 1 Della Bowen pumped 105 bbls. the first 12 hours and 170 bbls. the next 24 hours at 2,063-2,133 feet. Sun Oil Co.'s No. 6 Burleson pumped 65 bbls. at 2,084-2,135 feet.

Scurry County

Camp Springs Oil & Refining Co.'s No. 1 J. O. Quinn was temporarily abandoned at 3,866 feet. Northwest Oil Co.'s No. 1-A Welborn was dry and abandoned at 3,435 feet.

North Texas Completions

Archer County

Consolidated Oil Co.'s No. 19 Ferguson pumped 8 bbls. at 1,577-90 and 1,597-98 feet. Texhoma Oil & Refining Co.'s No. 16 Hamilton swabbed 15 bbls. in 6 hours at 1,808-11 feet. Empire Gas & Fuel Co.'s and Moran's No. 1 Parkey-A pumped 65 bbls. of oil and 100 bbls. of salt water at 1,576-77 feet. Kerbow and others' No. 1 Dale Brothers was dry and abandoned at 2,004 feet.

Marland Oil Co.'s No. 2 Turbeville pumped 190 bbls. at 1,510-32 feet; No. 3 made 93 bbls. at 1,505-28 feet; No. 5 was setting casing to test sand at 1,497-99 feet. McCarty Oil Co.'s No 4 Dillday Wilson made 30 bbls. at 1,571-82 feet. Mid-Kansas Oil & Gas Co.'s No. 3 Andrews was a duster at 1,551 feet. Shappell Oil Co.'s No. 1 Jackson was also dry at 1,915 feet. Simms Oil Co.'s No. 6 Turbeville made 200 bbls. in 1,516-38 feet. The Texas Company's No. 4 Turbeville-C swabbed 400 bbls. in the first 24 hours at 1,504-31 feet; No. 5 swabbed 1,400 bbls. at 1,502-31 feet.

Bridwell & Heydrick's No. 1 Abercrombie & Taylor pumped 10 bbls. of oil and an equal amount of water at 1,063-77 feet. L. T. Burns' No. 1 Reese was dry and plugged at 1,550 feet. It bailed salt water at 1,525-30 feet. Golding & Cochran's No. 1 Crawford had a small showing at 1,214-37 feet and was waiting for a shot. Grisham and others' No. 1 Harrison was a failure at 1,000 feet. Jeffers & Newby's No. 3 Andrews pumped 42 bbls. at 926-35 feet. Magnolia Petroleum Co.'s No. 2 Hudson swabbed 50 bbls. at 1,254-57 feet and was put on the pump; No. 16 Lowe pumped 65 bbls. at 1,260-65 feet. Murchison & Fain's No. 1 Holley was dry and abandoned at 1,602 feet. Pagan and others' No. 1 Hudson was abandoned at 1,184 feet, having found no sand. Pandem Oil Corp.'s No. 7 Hudson pumped 30 bbls. at 1,157-65 feet. Plains Production Co.'s No. 4 Prideaux made 10 bbls. at 772½-85 feet. Roxana Petroleum Corp.'s No. 4 Abercrombie & Taylor made 75 bbls. at 1,331-54 feet; No. 5 Kreeger pumped 125 bbls. at 1,426-33 feet. Shaw & Rathke's No. 3 Robinson-A pumped 12 bbls. at 658 77 feet. Texhoma Oil & Refining Co.'s No. 3 Wolf-A was dry and plugged at 1,377 feet.

Brown County

J. S. Cosden's No. 1 Arledge was dry and abandoned at 2,275 feet. Curry & Moore's No. 1 Kilgore Brothers was shot with 20 quarts at 1,277-88 feet, total depth 1,302 feet, and had 1,200 feet of oil in the hole; No. 1 Williams was shot with 20 quarts at 1,200-21 feet, total depth 1,223 feet, and made 30 bbls. Douglas and others' No. 2 Graham estate was a failure at 1,702 feet. Gray's No. 1 Byler was also dry at 1,616 feet. Humble Oil & Refining Co.'s No. 6 Hodnett made 50 bbls. at 1,152-84 feet; No. 15-B E. P. and W. H. Kilgore made 400 bbls. at 1,168-97 feet. McKenna's No. 6 Foster made 67 bbls. at 1,165 83 feet; No. 14 Foster, 200 bbls. at 1,162-98 feet, total depth 1,200 feet. McLester Oil Co.'s No. 8 W. M. Wooldridge, shot with 30 quarts at 1,225-55 feet, 200 bbls. Midwest Exploration Co.'s No. 2 Eddington was dry and abandoned at 1,295 feet. Prairie Oil & Gas Co.'s No. 1 Kilgore was also dry at 1,412 feet. West and H-Y Oil Co.'s No. 14 Newton was shot with 30 quarts at 1,150-66 feet and pumped 15 bbls. Williamson and others' No. 2 Wooldridge made 190 bbls. at 1,215-45 feet after an 80-quart shot. Moore & Fuhrman's No. 1 Eabs was dry and abandoned at 1,625 feet.

Callahan County

Amerada Petroleum Corp.'s No. 4 Long made 50 bbls. at 1,397 feet. Canary and others' No. 1 Cutbirth had a show of gas at 2,265-75 feet and was drilling ahead at 2,355 feet. Cranfill & Reynolds'

(Continued on Page 155)

TEXAS PANHANDLE WILDCAT PLAY EXTENDING IN ALL DIRECTIONS

Wildcatting in the Texas Panhandle is still spreading over that vast area, not only along the north side of where the main granite ridge is supposed to lie and thence on up into the Oklahoma Panhandle, but also on the south side of the ridge and even down below the group of counties commonly referred to as the Panhandle. A well is drilling in Armstrong County, which is south of Carson County, and Donley County, south of Gray County, also has a test which has been spudded and shut down. Now comes Randall County with the announcement of a new location in the SE cor. NW of Section 97, Block 5, H. & G. N. Survey, in the center of a 24,000-acre block. It is a five-year lease carrying a 50-cent rental and the test is to go to 3,500 feet.

Even Deaf Smith County in the southwestern corner of the Panhandle, adjoining Randall on the east, Oldham on the north and Potter County on the northeast, is getting considerable leasing play. Several blocks are being assembled and 3,500-foot tests are planned. The Dumas interests have 18,000 acres of five-year leases carrying 50-cent rentals centering around Section 93, Block 4, and are to spud a well within 90 days after approval of titles. Blood & Cook also have a block in the southwest corner of League 42 which calls for a test and the Bellmont Oil Co. of Denever, Colo., has posted a $5,000 forfeit to spud a test before November 15 on a 7,000-acre block in the northeast corner of the county. Slaton and others are assembling a 15,000-acre block around Section 36, Block 8, in this county and are to drill within 90 days after approval of titles if the block is completed.

New Mexico Taking Part

The campaign is also extending over into New Mexico where Haines and associates are offering spreads around a test which is to start within 90 days on a block centering around Section 5-21n-35e, Union County.

Three counties are included in the following wildcat report which may be classed as mavericks, since they are outside the regular Panhandle district but are far north of the West Texas Counties, which are receiving most attention at this time. These are Lamb, Cochran and Hockley counties. An interesting theory is being tested out in this general region and if by any chance one of the present tests drilling or contemplated should be successful an area equal in size to some American states would be opened to the drill. Ricker & Dodson's No. 1 Ellwood in the SW cor. of Section 55, Block A, R. M. Thomson Survey, located about 18 miles northwest of Lubbock and about 6 miles due west of Shallowater in Hockley County was down to 800 feet and was setting 10-inch the latter part of last week. This well has encountered five water sands, the fifth one, at 790 feet, carrying salt water. Ricker & Dodson assembled a 16-section block here and sold out spreads around it for $5 to $15 an acre. The same company also has another block in Lubbock County about 4 miles north of the town of Slaton and plans a test there soon.

Another Granite Ridge?

The theory on which these tests and others in the region are being drilled is that another granite ridge, similar in many respects to the Amarillo fold, traverses the region. Several companies have been leasing on both sides of the Panhandle and Santa Fe Railroad running northwest from Slaton and Lubbock. The Humble Oil & Refining Co. is said to have spent $175,000 in this vicinity recently paying 25 cents to $1 an acre and the Gulf Production Co. is reported to have spent $50,000. The Pure Oil Co. is also leasing in this general lo-

(Continued on Page 129)

Mr. Walter C. Teagle, President of the Standard Oil Co., N. J., is quoted from a recent interview as published in The Oil and Gas Journal, issue of June 24th, 1926:

"More and more fuel oil should be, and will be, cracked and less sold."

Universal Oil Products Company
Owners of the Dubbs Process
310 South Michigan Ave
Chicago, Illinois

Seminole Discovery Up to 7,935 Bbls.

Northwest Extension Tonkawa Deep Sand and Muskogee County Other Interesting Points in Oklahoma Fields

By J. L. Dwyer
Staff Correspondent, Oklahoma Fields

The most interesting spots in the Oklahoma fields during the past week were the Seminole Pool in Townships 10-6 and 9-6, Seminole County, Oklahoma, the northwest extension of the Tonkawa deep sand field, and Muskogee County which was resurrected from a state of inactivity by the completion of a good well 5 miles from the city of Muskogee.

In the Seminole Pool, the Independent Oil & Gas Co. and R. F. Garland's No. 1 Fixico, SW cor. NE, Section 26-9-6, the discovery well in the Wilcox sand, was cleaned out and agitated and responded with an increase in flow from 5,400 to 7,935 bbls. When the tools were run into the hole, they stopped 9 feet of bottom, and this amount of sand and cavings had accumulated. The cavings were cleaned out, and possibly the well was drilled 1 foot or so deeper, and the larger flow started. There is some difference of opinion whether the well was drilled deeper or not, the company officials are not sure on this point, but considering the great increase, it is likely the sand was touched slightly. If the sand and cavings had been loose they would have been carried to the surface by the flow of 5,400 bbls. If they were hard (which is probable) it would be a very simple matter to drill one foot after the bit had passed the cavings.

Regardless of the method, the result has made the Independent-Garland well one of the banner wells for Oklahoma, and has once more enhanced the value of the property.

Eye Tee Eye Section

In the Eye Tee Eye section of the pool, the Gypsy Oil Co.'s No. 1 Carter, SE cor. NE NW, Section 24-9-6, has decreased in flow. This well last week was making 3,700 bbls. daily, and on Sunday of this week, the flow had decreased to 2,320 bbls. and the well has started cutting 2½ per cent b.s. This performance does not improve the prospects of the Wilcox wells drilling in this section of the pool.

Probably the next well to be drilled in will be the Amerada Petroleum Co. and Gardner Petroleum Co. well in SE cor. SW NE, Section 23-9-6. This well is drilling in the Viola limestone at 4,110 feet and according to correlations of its log with the log of the Independent-Garland well, there is a similarity of formations. This has resulted in much hope being held for a good well on this location.

In the northwest extension of the Tonkawa deep sand pool, the Blackwell Oil & Gas Co.'s No. 1, SE cor. NE, Section 29-25-1w, had the Wilcox sand 4,323 feet and is flowing 45 bbls. an hour oil, and 30 bbls. an hour water. The water was found right in the top of the sand, and causes the propects of this area to be less rosy. It now seems that if any good wells are to be drilled in, they will appear to the west of the Gypsy Oil Co.'s No. 1 Gardner which is in the SE cor. NE SW, Section 28-25-1w.

Muskogee County Well

In Muskogee County, 5 miles from the city of Muskogee, W. R. Summerville's No. 1 Warrior, NE cor. NE, Section 17-15-17, had the old Muskogee sand 1,439-40 feet and started flowing 18 bbls. an hour. It is settling slighily, and has been agitated. The good flow of this well at such a shallow depth is a splendid operating proposition, and very profitable. The well is east of the old Taft structure which was perforated by a bevy of dry holes in an effort to find oil. It is probable that the oil will be found on the flanks of the structure. This well has revived the interest in the section of the county which has been given a heavy play, and several companies have purchased acreage close to the well.

Osage County Completions

Blackwell Oil & Gas Co.'s No. 1, SE cor. SE NW, Section 15-29-10e, is dry and plugged at 1,733 feet. Barnsdall Oil Corp.'s No. 42, NW cor. SE NW, Section 35-29n-11e, sand at 884-900 feet, shot with 140 quarts, 10 bbls.; Laurel Oil & Gas Co.'s No. 1, SW cor. SW NE, Section 27-28n-6e, plugged and abandoned at 1,763 feet, on account of lost tools; Tidal Osage's No. 18, NW cor. NW SE, Section 7-28n-7e, dry at 2,860 feet; Skelly Oil Co.'s No. 3, NW cor. SE NW, Section 2-27n-5e, dry and plugged at 3,035 feet; Phillips Petroleum Co.'s No. 6, NE cor. SW NE, Section 12-27n-5e, sand at 2,980-3,027 feet, shot with 90 quarts, 150 bbls.; its No. 11, SW cor. NE NE, same section, sand at 2,960-3,007 feet, shot with 90 quarts, 250 bbls.; also its No. 10, SE cor. NW SW, Section 7-27n-6e, sand at 2,958-3,000 feet, shot with 80 quarts, 175 bbls.; Kewanee Oil & Gas Co.'s No. 1, SW cor. SW NE, Section 34-27n-6e, sand at 2,793-2,843 feet, shot with 50 quarts, 1,200 bbls.; Pure Oil Co.'s No. 89, SW cor. NW NE, Section 11-27n-10e, sand at 1,270-1,305 feet, shot with 170 quarts, 20 bbls.; Lewis Oil Co.'s No. 8, SE cor. NW SE, Section 21-26n-6e, sand at 2,933-65 feet, shot with 80 quarts, 352 bbls.; its No. 9 SE cor. SW SE, same section, sand at 2,908-44 feet, shot with 90 quarts, 227 bbls. the first 18 hours, now making 310 bbls.; Phillips Petroleum Co.'s No. 3, SW cor. SE SW, Section 21-26n-6e, sand at 2,911-58 feet, shot with 90 quarts, 530 bbls.; Prairie Oil & Gas Co.'s No. 11, SW cor. NE SE, Section 21-25n-6e, sand at 2,695-2,700 feet, shot with 10 quarts, 25 bbls.; Miller and others' No. 1, SE cor. SE NW, Section 24-21n-9e, dry and plugged at 2,743 feet; Barnsdall Oil Corp.'s No. 16, NW cor. NE SE, Section 5-20n-12e, sand at 1,320-50 feet, shot with 120 quarts, 30 bbls.; Conners and others' No. 1, SW cor. SE NW, Section 29-20n-12e, dry and plugged at 1,675 feet.

Osage County New Work

Phillips Petroleum Co.'s No. 12, SE cor. NE SW, Section 1-27-n-5e, is a rig. same company's No. 11, SW cor. NE SE, Section 7-27n-6e, drilling at 400 feet, and No. 14, NE cor. NW SE, same section, drilling at 570 feet; Kewanee Oil & Gas Co.'s No. 2, NW cor. SW NE, Section 34-27n-6e, drilling at 150 feet; A. G. Oliphant's No. 4, SW cor. SE, Section 19-25n-8e, drilling at 125 feet; The Texas Company's No. 2, NW cor. SW, Section 29-25n-8e, drilling at 100 feet; Winona Oil Co.'s No. 5, SW cor. SE SW, Section 27-24n-10e, drilling at 850 feet.

Garfield County Completions

Mid-Continent Petroleum Corp.'s No. 64 Walker, NW cor. NE SE, Section 13-22n-4w, sand at 3,613-45 feet, swabbing 1,011 bbls., Roxana Petroleum Corp.'s No. 1-W Wolfe, SE cor. NW, Section 13-22n-4w, plugged and abandoned at 3,578 feet; Sinclair Oil & Gas Co.'s No. 13 Crews, C NW NW, Section 30-22n-3w, sand at 2,102-13 feet, 20 bbls.

Sinclair Oil & Gas Co.'s No. 62 Walker, SW cor. NW NE, Section 13-22n-4w, building rig and also for No. 63, SW cor. NE. It is moving in rig material for No. 64, C SE NE, and No. 65, CSL NE NE. Same company's No. 53 Hartley, CSL NW NW, Section 18-22n-3w, is a location.

Pawnee County

Magnolia Petroleum Co.'s No. 1 Tucker, NE cor. SE, Section 10-22n-3e, drilling at 300 feet; Jerry Shults has rig up for No. 3 Martin, NW cor. SW NE, Section 7-20n-8e; Sinclair Oil & Gas Co.'s No. 12 Mullendore, NW cor. NE, Section 10-20n-8e, is a rig; Fern Oil & Gas Co.'s No. 3 Lesher, CEL SW NW, Section 22-20n-6e, sand at 3,070-97 feet, shot with 10 and 30 quarts, 35 bbls.; Prairie Oil & Gas Co.'s No. 8 McNeal, NE cor. NW, Section 20-20n-8e, sand at 2,866-72 feet, shot with 10 quarts, 85 bbls.

Noble County

Magnolia Petroleum Co. has rig on the ground for No. 4 Sams, CWL SW SE, Section 15-21n-2w. Red Bank Oil Co.'s No. 1 Lau, SE cor. SW SW, Section 16-21n-2w, dry and abandoned at 5,313 feet; Magnolia Petroleum Co.'s No. 1 Reynolds, dry and abandoned at 5,110 feet.

Payne County

Magnolia Petroleum Co.'s No. 5 Armour, NW cor. SW SE, Section 8-19n-5e, is a rig; T. E. Mann's No. 3 Noble, CNL SE NW, Section 5-18-3, drilling at 150 feet; Magnolia Petroleum Co. has spudded No. 1 Thomas, SE cor. SW, Section 31-8-4e.

Burlingame & Sharp's No. 9 Unallotted, NE cor. SW NW, Section 13-19n-8e, sand at 2,352-92 feet, shot with 25 quarts, 200 bbls.; Gled Oil Co.'s No. 4 Ross, CNL NW SW, Section 13-19n-8e, sand at 2,400-10 feet, 150 bbls. naturally; its No. 5 NE cor. NW SW, sand at 1,600-06 feet, shot with 20 quarts, 100 bbls.; J. B. Grieves has a dry hole in No. 6 Lowe, CNL NW NE, Section 13-19n-8e, at a total depth of 2,515 feet; Steinberger & Smith's No. 2 King, CEL SE SE, Section 19-19n-8e, sand at 2,518-26 feet, shut in for 5,000,000 of gas; Linden and others' No. 1 Norfer, SW cor. SW, dry and abandoned at 1,305 feet.

Creek County

Magnolia Petroleum Co.'s No. 4 Derrisaw, NW cor. SE SE, Section 32-18n-7e, sand at 2,690-2,725 feet, shot with 60 quarts, 40 bbls.; Savoy Oil Co.'s No. 3 Walker, SE cor. NE NW, Section 23-17n-8e, sand at 2,328-50 feet, shot with 20 quarts, 30 bbls. of oil and show of water; Barnsdall Oil Corp.'s No. 3 Cobb, NW cor. SW SW, Section 26-17n-8e, sand at 3,194-3,205 feet, 142 bbls. initial production, now swabbing 85 bbls.; E. P. Harwell's No. 1 Chisholm, SE cor. NE SW, Section 3-17n-9e, sand at 2,003-41 feet, shot with 80 quarts, 115 bbls.; The Texas Company's No. 2 Simmons, NW cor. SW SE, sand at 2,021-56 feet, shot with 80 quarts, 65 bbls.; its No. 4, SW cor. SE SE, sand at 2,040-75 feet, shot with 70 quarts, 35 bbls.; Roxana Petroleum Corp.'s No. 2 Bruce, NE cor. NW NE, Section 10-17n-9e, sand at 2,060-2,103 feet, shot with 60 quarts, 135 bbls.; T. B. Slick's No. 1 Wind, SW cor. NW, Section 10-16n-8e, dry and abandoned at 3,720 feet; O'Rourke and others' No. 2 Vaughn, NW cor. NE SW, Section 33-16n-9e, dry at 3,454 feet; Tiger Petroleum Co.'s No. 4 Harris, SE cor. NW SW, Section 1-16n-11e, sand

FIVE PRODUCERS IN MEXICAN FIELD OUT OF SIXTEEN COMPLETIONS THERE

By George Blardone
Staff Correspondent, Mexican Fields

TAMPICO, Mex., Sept. 10.—Some 16 wells were completed in the Mexican fields of which 5 are producers and 11 are failures. The new production totals, say, 2,950 bbls., all of which is in the northern fields with the exception of about 400 bbls. in a small completion in the south fields. In the northern fields, Cia. Petrolera Franco Espanola, (Marland), has a 1,000-bbl. well in its No. 62 Limon finished at 2,348 feet. Leonard and others' (Mulcahey lease) finished another well in the Corcovado district, its No. 6 Garruche there being reckoned good for 1,000 bbls. at 2,005 feet. National Lines' No. 101 Conteca, a right-of-way well in the Ebano sector, is good for 500 bbls. at 2,240 feet, and in the Tanchicuin sector on the Panuco River, its No. 46 is good for around 50 bbls. at 2,080 feet, the oil coming from an upper stratum.

In the south fields, Cortez Oil Corp.'s No. 7, Lot 199 Amatlan, is good for around 400 bbls. at 2,028 feet.

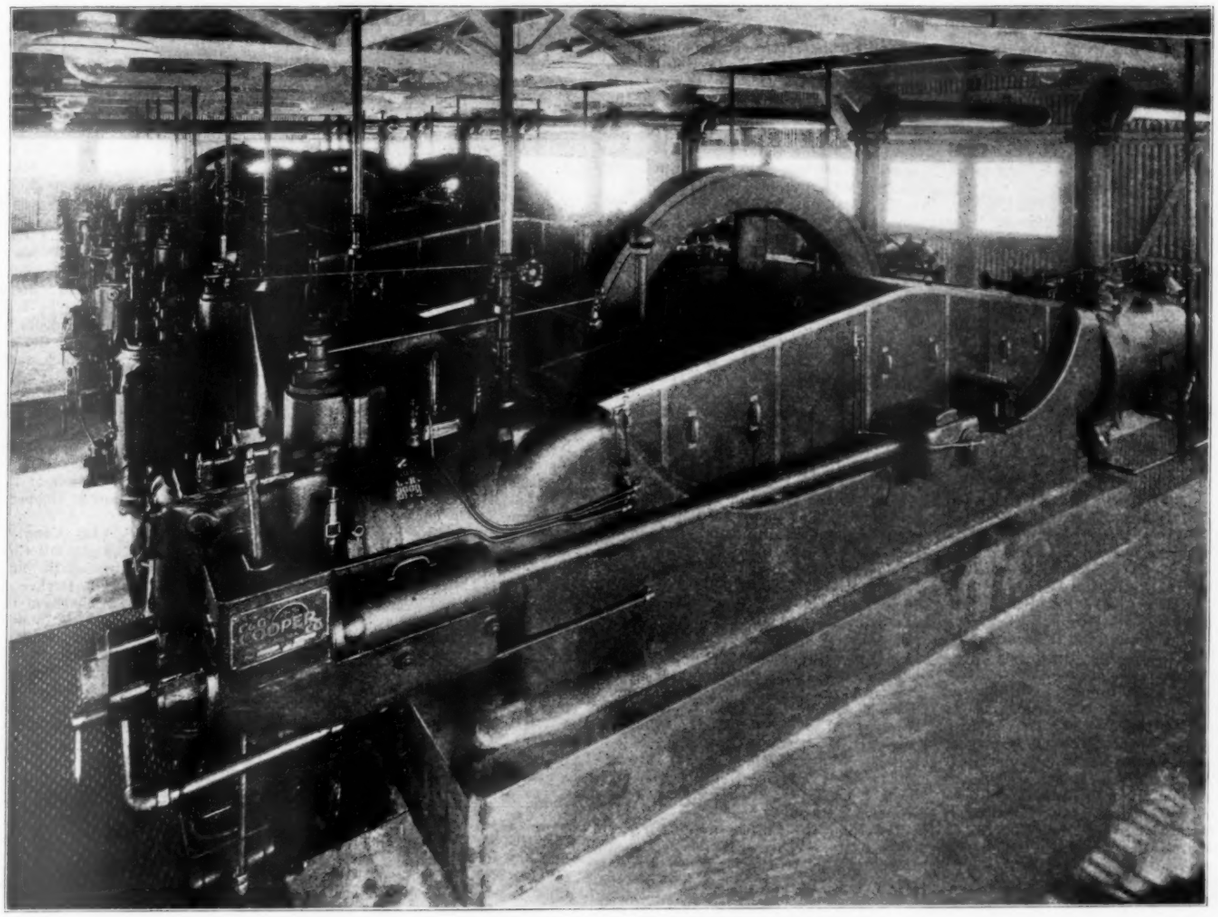
The Failures

In the northern fields the failures for the week follow: Cia Pet. Capuchinas No. 7-A Lot 12 West Maguabes, Panuco, is a failure at 1,650 feet. In the Limon Cia Pet. Franco Espanola drilled a dry hole at 3,002 feet in its No. 60-A. Mexican Gulf Oil Co.'s No. 22 Flores, Panuco, drilled into salt water at 1,912 feet, and in the Chapacao-Corcovado its No. 49 is dry at 2,250 feet. In Cacalilao, Transcontinental Petroleum Co.'s No. 263, Lot 4, is dry at 2,270 feet. Cia Pet. Francia Mexico, No. 9-A Piedras, Panuco, finished in salt water at 1,725 feet. In the Ebano sector, Mexican Petroleum Co. finished the following failures: No. 49 Chijol, 2,445 feet. No. 101 Conteca, a fluid failure, at 2,200 feet; Nos. 104 and 106, same, at 2,185 and 2,350 feet respectively. National Lines, same sector, has a duster in its No. 106 Conteca at 2,350 feet.

Field Operations

Bad roads, owing to rainy weather, continues hampering field operations more or less unless such operations are juxtaposed to rail or river transport. In the Panuco-Cacalilao sectors the following epitomizes the present status of active strings. La Corona Petroleum Co.'s No. 157, Lot 1 Cacalilao, is in gray lime with flint at 2,030 feet; its No. 184, Lot 4, in shale at 680 feet; No. 185 cemented 8-inch in the San Felipe at 1,146 feet; No. 186 has done the same with 10-inch, similar formation, at 1,160 feet. In the Chijol, Panuco, its No. 8 is 1,695 feet in gray lime; and it is rigged and waiting for permit in its No. 127 Piedras. Consolidated Oil Fields of Mexico, No. 6, Lot 6 Camolote, Panuco, has a hole drilled 2,100 feet, with some oil showing, but it has bridged at 1,650 feet. Cia. Pet. Francia Mexico, No. 13 Piedras, Panuco, is spudding. International Petroleum Co.'s operations in Lot 5 Cacalilao follow: No. 274 is running 8-inch in gray lime at 1,255 feet; No. 277, same formation, is swabbing at 1,850 feet and No. 278 is in gray lime at 1,690 feet. Mexican Sinclair Petroleum Corp.'s No. 18-A, Lot 2 Camolote, is in shale at

(Continued on Page 85)



Five Cooper Type-80 gas engine driven compressors recently installed by one of the largest oil companies on the Pacific Coast.

THERE is one class of men who never tire of boosting Cooper engines. They are the plant operators and they sum their reasons all up in one word ACCESSIBILITY. To them it means less work, less trouble, more hours on the load, better operating records and greater appreciation from "the higher-ups."

THE C. & G. COOPER CO.

Dallas, Texas Mt. Vernon, Ohio Los Angeles, Cal. Tulsa, Okla.

You can't tell whether a man is from California, Wyoming, Texas or Pennsylvania when he starts telling you about Cooper engines, for they all boost alike.

at 2,717-20 feet, shot with 10 quarts, 50 bbls.; its No. 2 Rogers, NW cor. SE SW, same section, sand at 2,629-31 feet, 45 bbls. naturally; H. U. Bartlett's No. 2 Bushyhead, SE cor. NW NW, Section 12-16n-11e, sand at 1,820-35 feet, shot with 25 quarts, 5 bbls. oil and lots of water; C. G. Tibbens' No. 26 Con-Mei-Sen-Nei, NW cor. SE, Section 30-15n-9e, sand at 3,543 feet, flowed and swabbed 250 bbls., shot with 5 quarts, flowed 750 bbls. first 24 hours, shot with 100 quarts, flowed and swabbed 500 bbls.

Dixie Oil Co.'s No. 2 Tah-Ha-Ney, CSL NW NE, Section 7-19n-9e, is a rig; Smith & Mann have rig on ground for No. 1 Derisaw, SW cor. NE, Section 34-19n-9e; Shaffer Oil & Refining Co.'s No. 11 Powell, CEL SE SW, Section 32-18n-7e, is a rig; Gypsy Oil Co. is spudding No. 14 Richardson, SW cor. NE NW, and moving in machine for No. 15, NW cor. SE NW, Section 1-18n-11e; Riverland Oil Co. is rigging up No. 4 Land, SE cor. NW NW, and No. 5, NE cor. SW NW, Section 1-18n-11e, is a rig; Sheridan Oil & Gas Co. is building rig for No. 2 Sherrill, NW cor. NW, Section 2-18n-11e; Twin State Oil Co.'s No. 8 Jack, SW cor. SE, Section 9-18n-11e, drilling at 300 feet; W. J. Cole and others' No. 1 Green, SW cor. NW NE, Section 22-18n-11e, is a rig; W. J. Sherry is digging cellar for No. 1 Bigpond, NE cor. SW SW, Section 11-18n-12e; Mid-Continent Petroleum Corp.'s No. 27 Stewart, NW cor. SW SE, Section 15-17n-7e, drilling at 800 feet; Burke-Greis-Darby are spudding No. 2 Scruggs, SE cor. NW NW, Section 21-17n-8e; Savoy Oil Co.'s No. 7 Johnson, SE cor. SW NE, Section 22-17n-8e, is drilling at 1,400 feet; McCullough Oil Co. has rig on ground for No. 1 Drew, SW cor. Section 1-17n-9e; E. P. Harwell is moving in rig and tools for No. 2 Chisholm, CSL NE SW, Section 3-17n-9e; Dixie Oil Co. is spudding No. 1 Francis, SE cor. SW SW, Section 5-17n-10e; Nowata Oil and Turman and Independent's No. 2 Pemberton, NE cor. NW, Section 8-17n-10e, is a rig; Interocean Oil Co.'s No. 4 Scott, NW cor. NE SW, Section 23-16n-8e, spudding; Aztec Oil Co. is rigging up No. 4 White, NE cor. NW NE, Section 11-14n-8e; The Texas Company's No. 5 Johnson, CEL NE SW, Section 26-14n-8e, is a rig; Mid-Continent Petroleum Corp.'s No. 2 Harry, SW cor. SE, Section 4-14n-10e, drilling at 210 feet; Buckholtz & Norman's No. 1 Harry, NW cor. NE SW, Section 27-14n-10e, is a rig.

Tulsa County

Sand Springs Home is spudding No. 2 Jefferson, SE cor. NE, Section 23-19n-11e; Carter Oil & Gas Co. is rigging up No. 4 Cato, C SE NE, Section 29-19n-11e; Iron Mountain Oil Co. is rigging up No. 1 Thatchery, SW cor. NW, Section 17-18n-14e; the Petroleum Co. has moved in machine for No. 4 Buck, SW cor. SE NE, Section 4-16-13e.

Suppes and others' No. 1 Ricketts, SW cor. NW, Section 5-17n-13e, sand at 1,439-55 feet, shot with 15 quarts, 5 bbls.

Okmulgee County

Bradley & Porter's No. 1 Irwin, NE cor. NW SW, Section 14-16n-11e, sand at 1,820 feet, 5 bbls. naturally; Sheridan Oil & Gas Co.'s No. 1 Woods, SW cor. SE, Section 21-16n-11e, dry and abandoned at 3,005 feet; same company's No. 2 Peters, SE cor. SW SW, Section 34-16n-11e, sand at 2,211-38 feet, shut in for 2,000,000 feet of gas; Jones & Henry Oil Co.'s No. 1 Bell, NE cor. SW NW, Section 5-15n-12e, dry at 2,923 feet; W. B. Pine's No. 1 Sells, NW cor. NW, Section 10-15n-14e, sand at 1,547-58 feet, flowed 25 bbls., sand at 1,569-89 feet, show of gas, drilled to 2,190 feet, plugged back to 1,625-29 feet, 490 bbls. initial production; The Texas Company's No. 5 Bruner, CWL SW SE, Section 16-15n-14e, sand at 2,370-79 feet, 360 bbls. naturally; same company's No. 14 Garrett, NE cor. NW SE, sand at 2,264 feet, 240 bbls. naturally, shot with 5 quarts, 350 bbls.; Twin State Oil Co.'s No. 5 Severs, NW cor. Section 22-15n-14e, sand at 2,280-89 feet, shot with 8 quarts, 25 bbls.; J. M. Kistler's No. 1 Boon, SW cor. SE SW, Section 19-14n-12e, dry and abandoned at 2,817 feet; E. A. Hutchinson's No. 1 Harris, NE cor. SW SE, Section 1-14n-14e, sand at 1,625-30 feet, 75 bbls. naturally.

Devonian Oil Co. is building rig for No. 8 Tiger, SW cor. SE SE, Section 24-16n-12e; Clober Brothers are building rig for No. 9 Grant, NE cor. NW NW, Section 3-15n-11e; Gray Oil and Devonian Oil Co.'s No. 3 Peloche, SE cor. NE SE, Section 23-15n-12e, is drilling at 1,180 feet; D. D. Michelson's No. 2 Unallotted, NW cor. NW NW, Section 29-15n-12e, drilling at 1,500 feet; Payne-Hyer and others' No. 1 Frances, SW cor. SE SW, Section 15-15n-14e, drilling at 350 feet; F. Sheedy's No. 4 McKinney, CWL SW NW, Section 16-15n-14e, spudding; Custer and others are moving in machine for No. 6 Perryman, NE cor. SE SE, Section 19-15n-14e; J. A. Swindler has rig on ground for No. 9 Lewis, C SE NE, Section 25-13n-11e; Haley & Halloran are building rig for No. 1 Harrison, SW cor. SE, Section 10-13n-12e; Prairie Oil & Gas Co.'s No. 2 Perryman, SE cor. SW SE, Section 6-12n-12e, drilling at 650 feet; E. R. Black is rigging up machine for No. 2 Jacobs, SW cor. Section 30-12n-12e.

Muskogee County

E. L. Kistler is spudding No. 3 Vanderslice, CWL NW SW, Section 29-15n-15e; Culp and others are moving in machine for No. 5 Vanderslice, SE cor. NW SE, Section 30-15n-15e.

C. M. Bradley's No. 4 Goodrich, CSL SW NW, Section 5-14n-19e, had the Muskogee sand at 650-72 feet and the Timberridge sand at 696-700 feet, making 25 bbls. from both sands.

Okfuskee County

Howard & Murphy are spudding No. 1 Smith, NW cor. SE SE, Section 18-13n-19e; Barnsdall Oil Corp.'s No. 5 Deaner, SE cor. NW SE, is drilling at 260 feet.

Seminole County

F. J. Searight's No. 1 Grayson, C SE SE NE, Section 33-10n-6e, is a location; his No. 2 Youngblood, NE cor. SE, Section 33-10n-6e, is a rig; Carter Oil Co.'s No. 2 Stewart, SE cor. NW SW, Section 34-10n-6e, drilling at 555 feet; No. 3, NW cor. SW, drilling at 145 feet; No. 4, NE cor. SW SW, running 12½-inch casing at 44 feet; Mid-Continent Petroleum Corp.'s No. 3 Grayson, NE cor. SW SW, Section 34-10n-6e, is a rig; Prairie Oil & Gas Co. is building rig for No. 1 Washburn, NW cor. SW, Section 34-10n-6e; Magnolia Petroleum Co.'s No. 1 Bruce, C SE SE NW, Section 2-9n-5e, drilling at 500 feet; Gypsy Oil Co. is rigging up No. 1 Cudjo, NE cor. SW NE, Section 4-9n-6e; Indian Territory Illuminating Oil Co. has rig on ground for No. 1 Harjo, SE cor. SE, Section 23-9n-6e; Barnsdall Oil Corp. has rig on ground for No. 6 Carter, NW cor. SW, Section 24-9n-6e; Tidal Osage is moving in rig and tools for No. 2 Carter, NE cor. NW SW, and has rig on ground for No. 4, NW cor. Section 24-9n-6e; Gypsy Oil Co.'s No. 4 Fixico, SW cor. NE NE and No. 5, NE cor., are both rigs, Section 26-9n-6e; Independent and Garland have rig on ground for No. 5 Fixico, SW cor. SE NE, Section 26-9n-6e, and also for No. 6, NW cor. SE NE; Independent and Inter-Ocean's No. 3 Jones, SW cor. SE, Section 26-9n-6e, is a rig; Pure Oil Co.'s No. 5 Strother, NW cor. NE SW, is drilling at 23 feet; No. 6, C SE SE SW, drilling at 58 feet; No. 7, SW cor., drilling at 20 feet, all in Section 26-9n-6e; Tidal-Osage's No. 5 Fixico, NW cor. SE NW, and No. 6, NE cor. NW, Section 26-9n-6e, are both setting surface pipe at 50 feet; Carter Oil Co. is building rig for No. 1 Lukes, NE cor. NE, Section 27-9n-6e; Prairie Oil & Gas Co. is rigging up No. 1 Strothers, SE cor. Section 27-9n-6e; Gypsy Oil Co.'s No. 1 Larney, SW cor. NW, Section 2-9n-7e, is a location; same company's No. 1 Stepney, NW cor. SW, Section 23-9n-7e, is also a location; Plover Drilling Co.'s No. 1 Add, SW cor. SE, Section 8-9n-8e, drilling at 350 feet; Producers & Refiners' No. 12 Amis, NW cor. SW SE, Section 31-8n-8e, is a rig.

Ramsey Oil Co. is rigging up No. 6 Salinda, SE cor. NW SE, Section 31-8n-8e; Independent and Atlantic are building rig for No. 4 Long, NW cor. SW NE, Section 32-8n-8e; Independent and Continental Oil Co. are spudding No. No. 4 Long, NW cor. SE, Section 32-8n-8e; Magnolia Petroleum Co. is spudding No. 3 Parker, NE cor. SE SW, Section 32-8n-8e; Producers & Refiners Corp.'s No. 4 Long, SE cor. SW NE, Section 32-8n-8e, is spudding.

Tommy Atkins and others' No. 1 King, C SW SW NW, Section 18-9n-9e, plugged and abandoned at 3,502 feet; Producers & Refiners Corp.'s No. 2 Scott, C SE SW SW, Section 33-8n-8e, lost hole at 3,310 feet, plugged and abandoned.

Hughes County

Independent Oil & Gas Co.'s No. 4 Davis, SW cor. SE, Section 26-9n-9e,

(Continued on Page 141)

LOCATIONS IN PANHANDLE AND NORTH CENTRAL TEXAS FIELDS

New locations for drilling operations in the Texas Panhandle and north central Texas fields reported in the past week are listed below. The "play" is well scattered, as the list will show, with Archer County leading:

Archer County

American Refining Co. and others' No. 5 J. H. Turbeville, 858 feet south and 150 feet west NE cor. Robert Carson Survey No. 150, A-85; G. J. Brown's No. 4 J. J. Perkins and others, 1,000 feet north and 150 feet east SW cor. SW, Section 14, League 3, Denton County school land, A-117; Magnolia Petroleum Co.'s No. 12 W. F. Parrish-B, 840 feet north and 480 feet west SE cor. SE SW, Section 26, H. & T. C. Survey, A-1,197; Mid-Kansas Oil & Gas Co.'s No. 3 W. L. Andrews, 920 feet south and 150 feet west NE cor. Robert Carson Survey No. 137, A-94; No. 4, 1,320 feet south and 965 feet west NE cor. R. Carson Survey No. 137, A-94; McCarty Oil Co.'s No. 3 Parrish Brothers-Duke, 150 feet north and west SE cor. Lot 1, Geraldine Subdivision and located in J. C. Tucker Survey, A-1,113; No. 4 Parrish Brothers, 150 feet north and east SW cor. Lot 3, Geraldine Subdivision and located in J. T. Tucker Survey, A-1,113; Gates and others' No. 11 W. H. Thomas, 150 feet south and east NW cor. south 80 acres, Lot 6, North subdivision, N. Thomas Survey, A-454; No. 12, 1,200 feet south and 450 feet west NE cor. same 80 acres; Golding & Cochran's No. 1 F. R. Smith, 450 feet north and 150 feet west SE cor. Section 1, G. P. Meade Subdivision of "55" Pasture, William Ainsworth Survey, A-1; Humble Oil & Refining Co.'s No. 16 G. B. Hamilton, 750 feet south and 150 feet east NE cor. Lot 2, and located in Lot 1, Crawford Subdivision, I. Holman Survey, A-162; Jeffers & Newby's No. 4 W. L. Andrews, 1,050 feet north and 450 feet east SW cor. north 37 acres, south 74 acres, west 194 acres, William Spavin Survey, A-371; Marland Oil Co.'s No. 4 W. H. Thomas-B, 450 feet north and 150 feet east SW cor. their 20-acre lease out of Lot 6, North Subdivision, N. Thomas Survey, A-454; Simms Oil Co. and L. T. Burns' No. 3 J. H. Turbeville, 564 feet south and 816 feet west NE cor. Section 21, Jefferson County school land, A-240; The Texas Company's No. 14 J. T. Richardson, 982 feet north and 2,108 feet west SE cor. Section 1, South Anderson Ranch Subdivision; Texhoma Oil & Refining Co.'s No. 2 W. H. Thomas, 645 feet south and 150 feet west NE cor. Lot 7, North Subdivision, N. Thomas Survey, A-454.

Armstrong County

Red Hill Corp.'s No. 1 Puckett Brothers, 330 feet south and 2,640 feet west NE cor. Section 3, Hooper & Wade Survey.

Clay County

British-American Oil Co.'s No. 1 J. J. Donley, 150 feet south and west NE cor. NE, Section 60, Parker County school land, A-374; Richardson Brothers' No. 1 Pat Barry, 1,500 feet south and 600 feet east NW cor. Lot 24, W. W. Silk Subdivision, Patrick Gilliland Survey, A-162, and located on Pat Barry 307-acre tract.

Cooke County

C. C. Lanier and others' No. 6 A. Hyman, 1,050 feet south and 150 feet east NW cor. their 40-acre lease out of T. J. Moss Survey, A-736; Lynch, Stahl and

(Continued on Page 130)

THREE WILDCAT WELLS CHIEF NEWS IN KANSAS FIELD DURING WEEK

By J. L. Dwyer

Three wildcat wells in the Kansas fields furnished the chief news of the week. In Kingman County, the Cassoday Oil Co.'s No. 1 Yoeman, C SE, Section 35-28-7w, touched a gas sand at 4,023 feet and the well produced 3,000,000 feet of dry gas which was later increased to 5,000,000 with no other change. This well is 8 miles south of the Port D. Fleeger well in Township 27-7w, which started the excitement in Kingman County early this year. The Cassoday well has been temporarily shut down.

In Barber County, Wakefield and others' No. 1, SE cor. SW SE, Section 28-31-9w, found 2,000,000 feet of gas at 3,590 feet.

In McPherson County, Merryman and others drilling a wildcat well in Section 29-18-2w, had a sand 2,915-41 feet which made 6,000,000 feet of gas.

Cowley County

T. B. Slick's No. 1, NW cor. NE, Section 22-32n-4e, is a rig; J. A. Hull and Emerald's No. 16 Kukuk, NE cor. Section 24-32n-4e, drilling at 1,080 feet; Roxana Petroleum Corp.'s No. 2 Churchill, SE cor. NE SW, Section 26-31n-2e, is a rig; also No. 3, NE cor. SE SW, is a rig; Trees Oil Co.'s No. 4 Lewis, NW cor. NE NE, Section 28-31n-4e, rig; Tidal Oil Co. is spudding No. 1 Harris, CSL NW NW, Section 17-31n-6e; Patton, Pryor & Lockhart are spudding No. 1 Drury, NW cor. NE NE, Section 31-31n-6e; Roxana and Phillips Petroleum Co.'s No. 1 Carr, NW cor. NW, Section 28-30n-3e, rig.

Gypsy Oil Co.'s No. 10 Shannon, NW cor. NE NW, Section 24-32n-4e, sand at 2,990-3,019 feet, 90 bbls. naturally. Roxana Petroleum Corp.'s No. 1 Masch, NE cor. SW, Section 25 31n-2e, sand at 1,865-83 feet, shot with 40 quarts, flowed 2,600 bbls. first 36 hours and 1,690 bbls. the next 24 hours; same company's No. 1 Van Sickle, NW cor. SE, Section 25-31n-2e, sand at 1,879-85 feet, shot with 40 quarts and made 716 bbls. in 11 hours and 1,137 bbls. first 24 hours, has averaged 1,020 bbls. last seven days; Lewis Oil Co.'s No. 9 Robbins, NE cor. NW SW, Section 31-30n-6e, sand at 2,855-85 feet, 35 bbls. naturally.

Butler County

Allison & Fitzwilliams' No. 4 Kramer, NE cor. SW NW, Section 3-28n-6e, is a rig; T. C. Johnson's No. 7 Blakeman, SW cor. NE SW, Section 3-28n-6e, drilling at 910 feet; Magnolia Petroleum Co.'s No. 1 Riggs, SE cor. NE, Section 4-28n-6e, is a rig; Phillips Petroleum Co.'s No. 2 Pettit, SW cor. SE SE, Section 17-28n-6e, drilling at 1,000 feet; Empire Gas & Fuel Co.'s No. 11 Starkey, SW cor. SE SE, Section 35-27n-4e, drilling at 900 feet; W. C. Hoyt's No. 8 Clark, C WL SE NW, Section 20-27n-6e, drilling at 300 feet; Empire Gas & Fuel Co.'s No. 2 Warrell, NW cor. SW SE, Section 12-27n-7e, drilling at 250 feet; Sinclair

(Continued on Page 133)

Does Your Tubing Feed This Monster

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GUIBERSON
BETTER BE SAFE THAN SORRY

Spindletop Declines to 84,000 Barrels

Two Good Wells in Light Gravity Section of Sour Lake Pool. Hull Pool Increases 3,600 Bbls. Orange Pool Drops

By P. L. McGreal
Staff Correspondent, Gulf Coast Fields

HOUSTON, Tex., Sept. 13.—The gross production in the Gulf Coast region dropped off 7,390 bbls. during the week. It is estimated at 191,785 bbls. compared with 199,175 bbls. during the previous week. The largest decrease was in the Spindletop Pool which shows a decline of 10,155 bbls. alone. Completions in other pools partially offset the decrease at Spindletop.

The Gulf Production Co.'s No. 1 Weed at Spindletop, deepened to 3,100 feet, is now flowing 2,500 bbls. a day. No. 4 Mann, is making 2,500 bbls. a day at 3,120 feet. The Atlantic Oil Producing Co.'s No. 5 McClean, is producing 2,500 bbls. a day at 3,470 feet.

The production of Spindletop for the 24 hours ending this morning at 7 o'clock was 84,000 bbls., a decrease of 8,000 bbls. a day within 72 hours.

The Hull Pool increased 3,600 bbls.; Goose Creek, 485 bbls.; West Columbia, 170 bbls.; Sour Lake, 1,750 bbls. The following pools show decreases: Boling, 390 bbls.; Lockport, 450 bbls.; Nash, 525 bbls.; Orange, 1,005 bbls.; Pierce Junction, 190 bbls., and South Liberty, 160 bbls.

The estimate for each pool is as follows:

Pool—	Gross Bbls.
Boling	2,260
Batson	1,510
Blue Ridge	1,400
Big Creek	1,900
Barber Hill	1,075
Dayton	183
Damon Mound	790
Edgerly (La.)	820
Goose Creek	10,725
Humble	4,566
Hull	22,500
High Island	145
Jennings (La.)	1,100
Lockport (La.)	6,600
Markham	176
Nash Dome	1,175
Orange	7,970
Orchard	140
Pierce Junction	3,110
Piedras Pintas	125
Spindletop	93,000
Saratoga	1,460
Sour Lake	9,900
South Liberty	4,140
Vinton (La.)	5,900
Welsh-Anse La Bute (La.)	80
West Columbia	8,925
Miscellaneous*	*110
Total	191,785

*Includes Nacogdoches, Washington and Kleberg Counties.

Southwest Fields

The estimated gross production for the Southwest Fields is placed at 43,990 bbls. against 46,360 bbls. last week, or a decrease of 2,370 bbls. for the seven days. The Mirando districts decreased 2,200 bbls. and the Lockhart Field 150 bbls.

The Humble Oil & Refining Co. advanced Mirando crude to $1.25, having cut it to $1 August 30. Neither the Magnolia Petroleum Co. nor the Texpata Pipe Line Co., the other buyers of Mirando crude, met the Humble company's reduction. Therefore the Humble company restored the former price.

The gross for each field it as follows:

Field—	Gross Bbls.
Luling	21,800
Mirando	15,400
Somerset	2,000
Calliham	90
Rockdale-Minerva	920
Lockhart (Lytton Springs)	3,780
Total	43,990
Grand total for this week	235,775
Grand total for last week	245,535
Net decrease	9,760

Wells completed during the week total 31, of which 3 were dry and 1 a salt water hole. Two gassers at Spindletop. The new production aggregates 40,560 bbls. and of this total 30,010 bbls. were developed at Spindletop deep sand section.

The following shows the results for the week:

District—	Comp.	Prod.	Dry	Salt Wtr.	Bailing
Batson	1	75	0	0	0
Blue Ridge	1	350	0	0	0
Barber Hill	2	600	0	0	0
Goose Creek	3	50	1	1	1
Hull	5	5,850	0	0	3
High Island	1	50	0	0	0
Orange	2	200	0	0	1
Pierce Junct.	1	175	0	0	1
Spindletop	12	30,010	2	0	3
South Liberty	1	0	1	0	0
Sour Lake	2	3,000	0	0	1
Vinton	0	0	0	0	3
Total	31	40,560	4	1	13
Last week	24	28,410	13	0	11

Good Sour Lake Wells

Two nice wells were developed in the light gravity section on the southwest side of the Sour Lake Pool. Eunice and others' No. 1 Eunice came in flowing 1,500 bbls. 36 gravity at 3,900 feet. Gordon and others' No. 1 Schaffers started off flowing 1,500 bbls. 36.6 gravity at 4,120 feet. The Gulf Production Co.'s No. 1-D McLean is bailing at 3,950 feet.

Approximately 5,500 bbls. of gross daily average of the pool is in the light gravity section.

Eunice and others' No. 2 Eunice is drilling around 3,400 feet. The Humphreys Corp.'s No. 2-B Bashara is drilling around 3,515 feet. No. 3 is at 2,980 feet. No. 4 is around 655 feet. Locations have been made for Nos. 1-E Bashara and 1-D Bashara. Also No. 2 Oxford-Kelly. The Gulf Production Co.'s No. 1 Cora Lee Jackson is drilling around 1,545 feet. No. 2 is rigging with a derrick up for No. 3. Orange Petroleum Co.'s No. 1 Merchant is drilling deeper. A derrick is standing for No. 2. On the north side, the Lake View Oil Co.'s No. 50 Hardin is drilling around 1,075 feet. The Humble Oil & Refining Co.'s No. 34 Hardin is rigging to drill deeper.

New Wells in Hull Pool

In the Hull Pool, the Humble Oil & Refining Co.'s No. 1 Lynd came in flowing 2,700 bbls. at 4,300 feet. Same company's No. 1 Beaver is flowing 2,700 bbls. at 2,800 feet, 33.9 gravity. The Republic Production Co.-Houston Oil Co.'s joint No. 135 Dolbear is pumping 50 bbls. at 2,730 feet and No. 137 Dolbear is making 150 bbls. at 2,590 feet. The Gulf Production Co.'s No. 18 Scarborough is flowing 250 bbls. by heads at 3,650 feet. The following tests are bailing: Hull Oil Co.'s No. 4 Harrison at 3,100 feet; Empire Gas & Fuel Co.'s No. 21 Barngrover at 3,100 feet; Gulf Production Co.'s No. 5 Phoenix at 2,625 feet.

Hull Dome

On the east side of the Hull Dome, the Republic Production-Houston Oil Co.'s No. 126 Dolbear is drilling at 2,345 feet. No. 136 is below 2,765 feet and No. 138, at 2,545 feet. The Gulf Production Co.'s No. 73 Phoenix is rigging; No. 74 is drilling around 1,875 feet, and No. 62 is working over; No. 18 Hannah, on the west, is at 2,235 feet, with No. 19 rigging. The Humble Oil & Refining Co.'s No. 22 Guedry is at 2,235 feet; No. 4 Hooks is shut down. Locations have been made for Nos. 2 Lynd and 5 Merchant. The Texas Company's No. 1 Armelin is at 1,980 feet. The Texas Company-Vacuum Co.'s No. 6 Hannah is around 3,300 feet. The Hull Oil Co.'s No. 11 Able is drilling at 2,035 feet. The Empire Gas & Fuel Co. set casing in No. 20 Barngrover at 3,200 feet. The Houston Production Co.'s No. 10 Taylor is at 1,100 feet. Mecom Oil Co.'s No. 1 Seale is rigging.

In the Goose Creek Pool, Gulf Production Co.'s No. 12 Chapman-Bryan is heading 140 bbls. at 4,400 feet. Its No. 34 Beaumont is pumping 50 bbls. at 3,475 feet. The Southern Exploration Co.'s No. 7 Freeman bailed salt water at 2,790 feet. The Humble Oil & Refining Co.'s No. 68 Smith is a duster at 5,080 feet. The Gulf Coast Oil Co.'s No. 9 Galliard is bailing at 2,775 feet.

The Gulf Production Co.'s No. 6 Hirsch, in the bay, is drilling at 4,710 feet; No. 10 State land is at 2,876 feet. The Humble Oil & Refining Co.'s No. 26 Smith is working over and No. 4 Myers is a location. On Galliard peninsula, No. 31 is drilling around 1,245 feet. Nos 10 and 12 are working over, and Nos. 9 and 17 are rigging to work over. The M. & B. Oil Co.'s No. 4 Scorrgea is rigging. Keen & Wolf's No. 9 Schilling is sidetracking.

Other Completions

The Mills Bennett-Humphrey corporation have a nice well in joint No. 3 Kirby at Barber Hill, Chambers County, 12 miles northeast of Goose Creek. It came in heading 500 bbls. at 2,205 feet. It is on the northwest side of the dome. Barclay and Meadows' No. 3 Barber is making 100 bbls.

The Bennett Production Co.-Humphrey corporation is drilling Nos. 2-B Kirby and 4 Barber.

At Blue Ridge, the Gulf Production Co.'s No. 10 Blakely is heading 350 bbls. at 3,100 feet.

The Gulf company is drilling No. 9 Luscher on the east side at 1,345 feet, and the Sinclair Oil & Gas Co.'s No. 2 Davidson is working over at 3,200 feet. On the south side, Humphrey Corp.'s No. 1 West-Schenck is rigging. The Gulf Production Co.'s No. 6 West-Schenck is drilling around 3,509 feet. The Navarro Oil Co. has a location for No. 1 Robinson, on the west side.

At Pierce Junction, the Rio Bravo Oil Co.'s No. 3 Settegast is flowing 375 bbls. by heads from 3,650 feet. The Navarro Oil Co.'s No. 2 Cain is bailing at 4,060 feet.

On the northwest-north side of the dome, the Rio Bravo Oil Co.'s No. 3 P. F. Settegast is fishing at 3,850 feet. No. 4 is drilling around 1,110 feet with a derrick standing for No. 5. The Gulf Production Co.'s No. 1 Jones-A, is at 1,435 feet, and No. 1 Jones fee is below 1,100 feet. J. F. Bashara's No. 2 Bender is at 3,190 feet, and No. 3 Bender is at 1,235 feet. The Marland Oil Co.'s No. 1 Prudential is drilling around 1,455 feet. On the east side of the dome, the Gulf company's No. 19 Taylor is drilling around 3,545 feet. On the northeast, the Texas Exploration Co.'s No. 10 Dooley, is at 2,875 feet. H.R.Cullen's No. 6 Howe is idle at 4,025 feet.

Orange Pool

The activity in the deep sands at Spindletop has taken the play away from the Orange Pool, temporarily at least. There is a marked decrease in the number of rigs operating there, many having been shipped to Spindletop. The Gulf Production Co. has a pumper in No. 1 McGuire, on the east side of Cow Bayou.

(Continued on Page 106)

SPINDLETOP DEEP SAND DEFINED NORTH AND EAST BUT NOT TO SOUTH

By P. L. McGreal

BEAUMONT, Tex., Sept. 11.—The deep sand area on the west side of the original caprock pool at Spindletop is apparently defined to the north and east. The sands drop off to the west, being much lower than in the original deep section and thus operators now look to the south for an extension. The Magnolia Petroleum Co. is drilling No. 1 fee on its tank farm, the location being some 350 feet south of production. The depth of the hole is around 1,500 feet. It is the most interesting test now drilling.

The gross production shows a decline this week compared with last of 10,155 bbls., notwithstanding that 12 wells were completed during the seven-day period, two being dry. Two were gassers. The new production totals 30,010 bbls.

Last week Wilson & Broach's No. 1 Weed was reported abandoned in salt at 2,700 feet. It was east and north of production. This week the Rio Bravo Oil Co.'s No. 6 T. & N. O. right of way blew in as a gasser and spraying about 60 bbls. of oil. It, too, is north and east. No. 7 T. & N. O. blew gas for 10 hours and then sanded. Both are considered edge wells. No. 4 T. & N. O. came in flowing 4,000 bbls.

The Gulf Production Co. completed No. 3 Roche good for 9,600 bbls. initial and is bailing No. 4 Roche at 2,490 feet. No. 3 is below 3,260 feet. No. 4 Mann was completed at 2,975 feet flowing 3,500 bbls. No. 3 Weed is a 1,000-bbl. well. No. 5 Weed is only 50 bbls. at 3,275 feet and No. 4 Oakwood was abandoned at 2,600 feet. The Yount Lee Oil Co.'s No. 6 Gladys is making 3,000 bbls. and No. 8 Gladys 4,500 bbls., 70 per cent water, at 3,100 feet, gravity 28 degrees.

The Atlantic Oil Production Co.'s No. 3 McLean is 2,500 bbls. initial, 28 gravity, at 3,216 feet, and No. 6 McLean started off flowing 6,000 bbls. at 3,260 feet. That company has an average of 9,000 bbls. per day at the end of the week.

The Paggi Oil Co.'s No. 2 Gordon to the west is making 300 bbls. at 3,225 feet. Combest and others' No. 1 Ewing bailed dry at 3,350 feet and the screen is being pulled to drill deeper. The Spindletop Gusher Oil Co.'s No. 1 Rush is bailing at 3,280 feet, as is Ward & Wise's No. 1 McFaddin at 3,425 feet.

Activity on Small Acreage

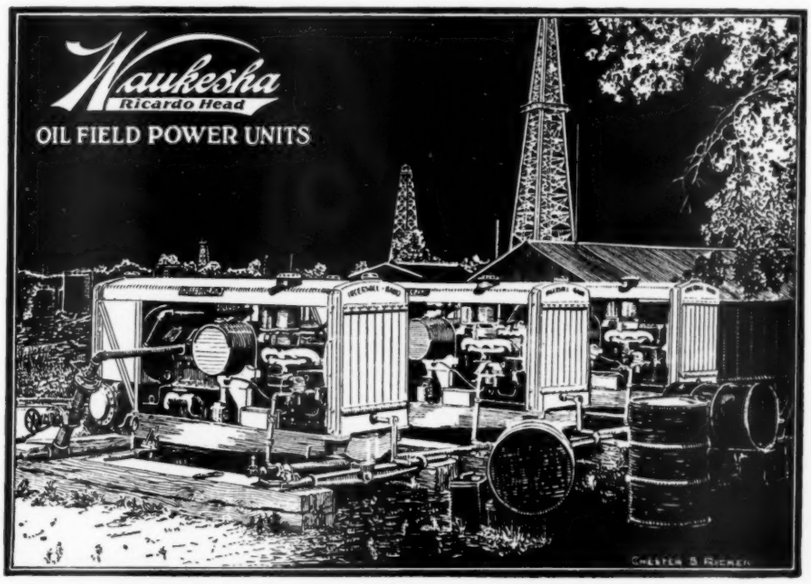
Drilling is just as active as ever on the small acreage. The gross production for the first eight months of the year is estimated at 4,069,815 bbls., which is the largest in 20 years. Several of the first wells in the extension are being drilled deeper from 2,600 to 2,700 feet.

The Sun Oil Co. is deepening Nos. 1, 3 and 4 McLean from 3,100 feet and is drilling No. 7 at 1,765 feet with locations for Nos. 5 and 6. The Rio Bravo Oil Co. is rebuilding the derrick over No. 7 T. & N. O., destroyed by fire when the gas from a blowout ignited. Locations have been made for Nos. 8, 9 and 51. No. 52 is drilling at 980 feet, located between Nos. 2 and 4. No. 51 is located between Nos. 1 and 3 on the right of way, extending along the east side of the pool, 200 feet wide. No. 1 Price is at 2,435 feet.

On the McLean 5-acre tract the Atlantic Oil Producing Co.'s No. 5 is at 3,425 feet. No. 7 is around 3,445 feet. No. 8 is around 3,655 feet. No. 1 is being deepened. A derrick is up for No. 10. Locations have been made for Nos. 11, 12 and 13. This will serve to give an idea of how close the wells are spaced

(Continued on Page 108)

Waukesha Engined Ingersoll Rand Compressors at Wewoka, Okla.



Reviving Dry Holes

Charley Gladden, Supt., in the Wewoka District for the Magnolia Petroleum Co., reports that these Waukesha - Ingersoll Rand units of his have not only increased the flow from producing wells but have revived wells which have ceased to flow. Although designed for 400 pounds discharge pressure they have been run continuously at 640 pounds, for sixty days at a time—thus demonstrating the reserve power of the Waukesha "Ricardo Head" Engines and their unfailing reliability.

Waukesha "Ricardo Head" Engines are not only used as standard equipment by Ingersoll Rand and Portable Rotary Rig Co., in the Oil Fields, but are available in Oil Field Power Units varying in size from 40 to 120 H. P. and can be obtained from and serviced by men who are familiar with the requirements of the Oil Industry. Write for "Oil Field Bulletin".

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Haynesville Test More Promising

Lawson Area Disappoints El Dorado Operators. Good Producer in Caddo Parish Area that Had Been Shunned

By James H. Dameron
Staff Correspondent, Louisiana-Arkansas

SHREVEPORT, La., Sept. 13.—Wildcats again arrested the attention of oil operators in the Louisiana-Arkansas district while in the old fields Caddo made its periodical bid for the spotlight with a sensational well and contributed to the general increase in completions and new production.

Probably the most interesting of the wildcats and the most promising at this time is the Haynesville deep test. The test is Gilliland Oil Co. and Ramsey's No. D-1 Taylor, SW SW, Section 14-23-8, in the heart of the Haynesville Field and its present oil showing is coming from 17 feet of hard formation topped at 4,513 feet.

A few days ago it was standing with 3,000 feet of fluid in the hole with little salt water showing in the high-gravity oil. Thursday it was bailed down within 400 feet of bottom and the fluid was 90 per cent brackish but Saturday morning the test was all the more promising. More than 3,000 feet of oil was standing in the hole and only a very little bit of brine showing. The test is making a little gas.

Arrangements were being made Saturday morning to take another core. The hole is to be deepened if the core warrants it. Four and one-half inch casing was cemented at 4,513 feet. The horizon from which production is coming is hard and it was rumored that the formation may be shot if deeper drilling fails to make the well flow.

Lawson Disappoints

The Lawson area, which was the latest scene of excitement for the El Dorado operators, appeared none too promising at the end of the week. Simms Oil Co. and Sun Oil Co.'s No. 1 Simmons, Section 9-18-13, which blew out at 2,650 feet and caused operators to indulge in a frenzied land buying campaign, cored salt water sand at 2,702 feet.

When the 30,000,000-foot gasser blew out, wrecking the derrick and flooding the terrain with salt water, it could not be closed in for several days. In staging its wild act the well drilled itself on down to 2,702 feet where a core Friday night revealed the well to be in salt water sand. The hole is to be drilled down to the 2,900-foot horizon to test out the sand there, which Walber and associates found to bear oil.

Offsetting the Simmons is Natural Gas & Fuel Corp.'s No. 1 Cordell to the southwest. This test will give the 2,650-foot sand a thorough test, which was impossible at the Simmons because of the hole. No. 1 Cordell should be ready to set casing early next week. It was drilling brown lime at 2,193 feet Saturday morning.

Approximately 6 miles to the southwest Walber and associates' No. 2 Cordell, Section 6-19-13, is throwing cold water on the Lawson area. It had a showing of oil in sand at 2,967 to 2,981 feet but salt water clouded its prospects. The water is believed to be coming from behind the casing set on top of the sand and operators are recementing. Walber sold his interest in the test several days ago to El Dorado operators.

Between Lisbon and El Dorado Imperial Oil & Gas Co.'s No. 1 Goodwin, Section 26-17-16, tested dry with a show of salt water at 2,975 feet. There was no showing of oil or gas.

Good Well in Caddo

Livening Caddo was Victor Wenzel's No. 1 Thomas, Section 15-20-15, 4 miles east and south of Oil City which was completed as a good producer in territory that had been shunned. The well had sand at 2,000 to 2,006 feet and started off making 1,000 bbls. of clean oil that tested around 29 gravity. However, the well fell off rapidly and was completed for 350 bbls. natural. Saturday morning its production was slightly under that figure and the oil was showing a little water. Wenzel is building derricks for offsets.

There was general increase in completions during the week, 20 more than was recorded for the previous seven-day period. In all there were 53 completions, 21 dry holes, 3 gas wells and 29 oil wells with a combined production of 2,002 bbls. Field operations fell off slightly, and little new work was reported.

Week's Completions

Louisiana led in completions with 31 Fourteen were oil wells with an aggregate production of 1,270 bbls. and two were gas wells completed in the Monroe Field. One was a 37,000,000-foot well, one of the best to be completed in Monroe this year. The 15 dry holes were well scattered through the old areas and the rank wildcat territory.

Arkansas' completions totaled 22, of which 15 were oil wells making 732 bbls. in the aggregate. Most of the completions were in the Lisbon Field but all were small producers. The biggest wells were finished in Smackover and the Nevada Field trained with the next largest. Six Arkansas tests were recorded as failures and a small gas well rounded off the total.

Test in Texas

Prominent and interesting among the tests drilling along the Caldwell-Angelina flexure is Sebastin and Smith's No. 1 Warner Stave Co., Nichols Survey, Sabine County, Texas. The test is about 6 miles west of the Louisiana line, and is being drilled in the northwest part of a 7,100-acre block.

The test has encountered gas all the way down to its present depth 1,694 feet where it showed for a 10,000,000 or 12,000,000-foot gas well, then went into salt water and finally went dead. The first cap rock was topped at 1,683½ feet and was 5 feet thick. The next five feet of drilling was in brown sand and into the second cap rock which was penetrated six inches. There the test showed for a good gas well and casing was cemented on top of the first cap rock and let set seven days.

While drilling out the plug the fluid was pushed out of the hole by the gas pressure and sent half way to the top of the crown block. The bailer was run in the hole and then the well started flowing salt water by heads. It flowed salt water for a few hours and then quit. While flowing salt water the plug was near the top and drillers could reach in and pull off chunks of cement.

Sometimes when the bailer was run the plug was on bottom, another time it would be half way up the hole and sometimes it rose to within two feet of the surface. Now the gas and salt water both have disappeared. The test is to be cored.

The first gas was found between 340 and 440 feet where 500,000 feet showed. The second, a 3,000,000-foot showing, was found at 1,210 to 1,245 feet. The test made gas approximately 10 hours and then started making fresh water. In the last showing the gas pressure was so strong it was difficult to keep the tools in the hole with heavy mud. The test is off the flexure just a short distance to the north and the majority of the acreage lies on the flexure.

The Sebastain and Smith test makes the test to be drilled by F. Godchaux, a few miles due east and in Sabine Parish, Louisiana, all the more interesting. It is No. 1 Nona Mills, NW SE, Section 12-4-13, and acreage was blocked on both sides of the Sabine River by Godchaux after a thorough study of geological conditions there. North and a little west of Godchaux's location there was a hole drilled 700 feet several years ago and abandoned because of a gas blow out. Diagonally northwest one-half mile was another drilled to 1,103 feet and abandoned when a gas blow out ruined the hole.

Godchaux's block is one of the most promising on the flexure and the first test is to be cored all the way down. The leases are situated south of the apex of the flexure and north of the steeply dipping beds of the Catahoula formations.

Production Off

Production in the district broke sharply and the daily average went off 3,575 bbls. during the past week, due principally to heavy losses in each state's major fields. Arkansas lost most when its daily average went down 2,725 bbls. Smackover heavy lost more than 2,200 bbls. and all other fields save Nevada lost slightly.

Urania in Louisiana lost 1,365 bbls. in daily average because of the decline of old wells and the number of old wells off the producing list while they are being worked over. Caddo rallied and went back into the class of 10,000-bbl. pools. All other fields in the State save Caddo heavy and Haynesville gained to cut down the southern state's losses.

PRODUCTION BY FIELDS

Arkansas

Smackover heavy	120,375
Smackover light	14,765
El Dorado	6,845
Lisbon	8,480
Nevada	2,000
Stephens	1,760
Total	154,225

Louisiana

Bellevue	2,090
Caddo light	10,450
Caddo heavy	2,890
Cotton Valley	7,355
De Soto and Red River	4,165
Elm Grove	525
Haynesville	9,320
Homer	5,620
Urania	13,535
Total	55,950
Total both fields	210,175
Total last week	213,750
Difference	3,575

LOUISIANA

Bossier Parish

Two shallow wells were completed in the Bellevue Field last week. Gulf Refining Co.'s No. A 21 Bliss and Wetherbee, Section 15-19-11 was finished at 425 feet, making 10 bbls. of oil and 75 bbls of salt water on the beam. George W. Wetherbee's No. A-13 fee, Section 15-

SKELLY WELL BELIEVED TO BE BEST DRILLED IN EASTERN NEW MEXICO

By Special Correspondent

ARTESIA, N. Mex., Sept. 11.—The Skelly Oil Co.'s No. 1 wildcat on the Buelah Lynch Permit in Section 22-17-31, eastern Eddy County, 5 miles west of the Maljamar's producer, is flowing by heads every 30 minutes, with production of 150 bbls. naturally. With the bit 4 feet in a sandy lime, topped at 3,474 feet, the well is believed by big company scouts and production men to be the best ever drilled in eastern New Mexico, it being the opinion the well will pump 500 bbls. without being drilled deeper or given a shot. Running 215 feet higher structurally than the Maljamar the Skelly test, since drilling through the salt has attracted considerable attention, as numerous showings of both oil and gas were obtained.

The well is located on a Government permit, Skelly controlling Sections 11, 14, 15, 16, 21, 22, 23, 26, 27, 28, 33, 34 and 35 all in Township 17, Range 31e. The crew is underreaming to set the 6-inch casing. The well will not be completed for several days, due to a pending pipeline deal. Considerable storage has been erected, a control head installed and the gas from an upper sand bradenheaded.

Considerable acreage has changed hands since the well struck pay. The Pueblo Oil Co. last week purchased from Ralph Shugart the Gessert permit, consisting of the west half of Section 1, north half Section 17, north half Section 18, Township 17, Range 31e.

The completion of the Skelly well and the picking up of a lime in the Wooley-Jones No. 1 on the Beeson permit in the SW of Section 33-17-30, gives this well an excellent chance of making a producer.

With the Skelly well a producer, interest is turned to the No. 1 of Bruce Sullivan in the SE of Section 1-18-31, which drilled out of the salt at 2,040 feet, and to the Maljamar's No. 1 on the Grace Mitchell permit in the SW of Section 5-17-32, and the Ohio Oil Co.'s No. 1 on the William Mitchell permit in Section 18-17-32.

In the Artesia Pool the Decum Development Co. is cleaning out No. 1 on the Vandagriff permit in the center of Section 5-17-28, following a shot run in the 2,250-foot sand.

Flynn, Welch & Yates are completing No. 51 in the NW of the NE of Section 28-18-28, it being shot from 2,090 to 2,120 feet.

West of Lake McMillan, the Hamilton Petroleum Co. has a good chance of making a well in No. 1 Billings in Section 12-19-26, which has picked up a sand at 1,125 feet. Casing is being cemented and the well will be drilled in during the coming week.

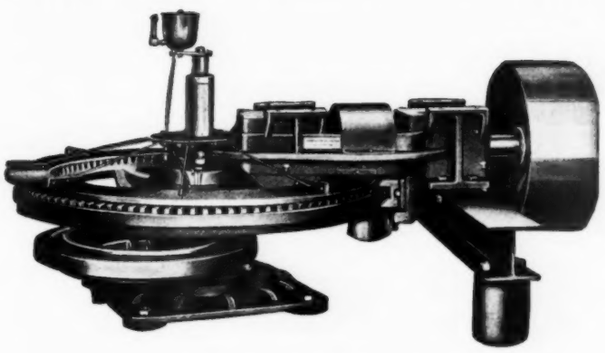
Phillips and Welch have started drilling a second test in the SE cor. NE SW, Section 18-18-28, being down 300 feet.

A new location has been made on the caprock by the Exploration Co. of San Angelo, Tex., this being in the NE, Section 25-19-35. Rig timbers have been ordered to the location.

Drilling Report—Eddy County

Compton and others' No. 2 Mann permit, Section 3-18-27, shut down at 2,060 feet; Cook-Ironside's No. 1, Section 10-20-29, shut down at 2,300 feet; Decum Development Co.'s No. 1 Vandagriff permit, Section 5-17-28, cleaning out after shot; Flynn-Welch & Yates' No. 49, Section 3-18-28, drilling below 1,400 feet; No. 3 Dunn permit, Section 10-18-28, drilling below 1,700 feet; No. 51, Section 28-18-28, cleaning out after shot; Rehn and others' No. 1 Winans, Section 15-18-26, drilling below 2,030 feet; Hamilton Petroleum Co.'s No. 1 Billings, Section 12-19-26, testing oil sand at 1,125 feet; Hasenfuss-Donley's No. 2 Keyes, Section 13-18-28, drilling below 2,600 feet; Henerson-Dexter-Blair's No. 1, Sec-

(Continued on Page 129)



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19-11, was completed at 395 feet for a 100-bbl. pumper. Wetherbee's No. A-14 fee, Section 15-19-11, is to be drilled in at 396 feet with cable tools.

Caddo Parish

Caddo Parish, which frequently animates a quiet week in the field with a sensational well, came under the spotlight with a 350 bbl. well in territory frowned upon. The well was Victor Wenzell's No. 1 Thomas, Section 15-20-15, 4 miles east and south of Oil City, which was completed in sand at 2,200-06 feet. In Pine Island Tholl Oil Co.'s No. 11 Bashara, Section 23-21-15, was completed in the chalk rock at 1,710 feet for a 15 bbl. pumper. In the same district Page & Caldwell's No. 1 Hobbs, Section 29-21-15, was dry and abandoned at 2,250 feet. Ramsey and Associates' No. 1 Muslow Oil Co., Section 32-21-15, was dry and abandoned in the chalk rock at 1,700 feet. The test was dry at 2,100 feet and had been plugged back. North of Oil City Morris Drilling Co.'s No. 1 Palo Oil Co., Section 1-20-16, was completed at 2,239 feet, pumping 10 bbls. of oil and 150 bbls. of salt water. Gulf Refining Co.'s No. 250 Ferry Lake, Section 29-21-16, was a failure at 2,393 feet and was abandoned. Double I. I. Oil Co.'s No. 8 Spell, Section 15-21-15, was completed at 1,735 feet for a 15-bbl. pumper. Dixie Oil Co.'s No. 17 Muslow, Section 7-20-15, is making 10 bbls. on the beam from 2,262 feet.

Five deep tests in Caddo are grinding away for the Trinity. Dixie Oil Co.'s No. 1 Jolly, Section 27-22-15, is drilling in limey shale at 4,293 feet. Gulf Refining Co.'s No. 1 Byrd, Section 2-19-14, drilling hard blue shale at 3,795 feet. Magnolia Company's No. 16 Dillion, Section 24-21-15, is shut down for orders at 3,578 feet and No. 17 is drilling in lime at 3,586 feet. A fishing job at 3,552 feet is delaying progress at Magnolia Company's No. 1 Spell, Section 29-21-15, Magnolia Company's No. 1 Wiley Bradford, Section 24-21-15, is drilling in hard lime at 3,810 feet. The Texas Company's No. 42 C. M. L. Co., Section 23-21-15, is cleaning out at 3,729.

A rig is up for Dixie Oil Co.'s No. 18 Muslow, NW cor. NE Section 18-20-15; No. 79 Robertshaw, Section 14-21-15, is drilling at 850 feet; No. 10 Slattery, Section 27-21-15, is drilling in shale at 1,770 feet. Gilliam Syndicate's No. 1 Sellington, Section 17-21-14, is drilling at 1,430 feet. Eight hundred feet of oil in the hole from 2,265 feet at Gulf Refining Co.'s No. 248 Ferry Lake, Section 15-20-16, after the test was left standing for 12 hours. Two bbls. of oil were bailed in 10 hours, but the hole could not be bailed dry. Two-inch tubing with a packer is being set. Gulf Company's No. 249 Ferry Lake, Section 16-20-16, is waiting for a Standard rig at 2,287 feet; No. 251, Section 15-20-16, is blowing 3,000,000 feet of gas and making 75 bbls. of oil from 2,260 feet.

Lewis Oil Corp.'s No. 8 Vespy, Section 15-21-15, is drilling at 300 feet. Ohio Oil Co.'s No. 20 E. K. Smith, Section 12-21-15, is drilling in chalk rock at 1,540 feet with a showing of oil; 6-inch casing was cemented at 1,475 feet at No. 21 Smith. Radio Oil Corp.'s No. 3 Louisiana Oil Co., Section 31-21-15, is waiting for 6-inch to set at 1,300 feet. The liner is being set at 2,305 feet to test at Superior Oil Co.'s No. 3 Youree, Section 26-20-15; No. 4 is waiting for a Standard rig at 2,290 feet.

Casing is being bailed at The Texas Company's No. 64 Caddo Levee Board, Section 33-21-16; 6-inch was set at 826 feet at No. B-1 Caddo Levee Board, Section 22-15-12; No. 40 C. M. L. Co., Section 23-21-15, is drilling in sand rock at 1,955 feet; No. 54 S. P. Harrell, Section 4-21-16, is being cleaned out at 2,395 feet; and No. 3 Perry, Section 3-20-16, is waiting on a standard rig at 2,249 feet. Six-inch casing was cemented at 1,295 feet at Thomason and associates' No. 2 Muslow fee, Section 31-21-15. Tholl Oil Co.'s No. 1 Allday, Section 31-21-15, is a derrick. Thomason and associates' No. 3 Muslow fee, Section 31,-21-15, is a derrick. Unity Petroleum Co.'s No. 2 Crystal fee, Section 24-21-16, tested salt water at 1,930 feet and is whipstocking to 1,045 feet. The liner was set to test at 2,265 feet at Victor Wenzell's No. 1 Wemple, Section 14-20-15.

La Salle Parish

Nine completions was Urania's contribution to the completion report for the week, however, all of the oil wells save one were making cut oil. O. W. Clark's No. 5 Tullos, Section 23-10-1e, is pumping 50 bbls., 8 per cent salt water from sand at 1,501-05 feet. N. C. Hudson's No. 1 Urania, Section 6-10-2e, was a failure at 1,567 feet and was abandoned. H. L. Hunt's No. 3 Griswold, Section 2-9-1e, is pumping 100 bbls., 50 per cent salt water from sand at 1,509-12 feet. Louisiana Oil Refining Corp.'s No. C-4 Tremont, Section 2-9-1e, is an abandoned location. Natural Gas and Fuel Corp.'s No. A-4 Russell, Section 26-10-1e, was completed at 1,549-53 feet flowing 100 bbls., 7 per cent salt water. Pima Petroleum Co.'s No. B-5, Urania, Section 7-10-2e, formerly Beckman & Freeman, was completed at 1,527-29 feet, pumping 50 bbls., 10 per cent salt water; No. B-8 was dry and abandoned at 1,531 feet. Taylor trustee's No. 4 Urania, Section 19-10-2e, was dry and abandoned at 1,-581 feet. Wetherbee and associates' No. 3 Urania, Section 2-9-1e, is flowing 200 bbls., 10 per cent salt water, from sand at 1,495-99 feet. Yeary and Bristol's No. 4 Urania, Section 2-10-2e, is flowing 50 bbls. of oil from 1,527-31 feet. On the Winn Parish side Allen and associates' No. 1 Allen, Section 23-10-1e, is flowing 300 bbls. of clean oil from 1,-504-16 feet.

A derrick is up for Catalina Oil Co.'s No. 1 Urania, NW cor. NW SW, Section 8-10-2e; Chal Daniels' No. 1 Urania, Section 2-9-1e, has resumed drilling and is going ahead at 260 feet. Finn and House's No. 2 Smith, Section 26-10-1e, is in sand at 1,546-50 feet and waiting for a standard rig. A derrick is up for Hartanzo Oil Co.'s No. 1 Urania, SE cor. E half NW, Section 7-10-2e. Eight-inch casing was cemented at 1,501 feet at H. L. Hunt's No. 4 Griswold, Section 2-9-1e. Hunt, McCurry and Zoder's No. 3 Winneberry, 600 feet west and 150 feet north SE cor. SW SE Section 7-10-2e, is a rig. A derrick is up for Jones & Dobbs' No. 2 Russell, SW cor. E half SE SW, Section 24-10-1e. Keene & Woolf's No. 1 Griswold, Section 3-9-1e, is being bailed to test sand at 1,505-07 feet; 6-inch casing was cemented at 1,-503 feet at No. 2.

Being Rigged

Louisiana Oil Refining Corp.'s No. B-35 Tremont, Section 25-10-1e, is being rigged, and C-6 Tremont, Section 3-9-1e, is a derrick. Arrangements are being made to blow Montague Oil Co.'s No. 3 Zenoria Lumber Co, Section 11-9-1e, with air. Natural Gas & Fuel Corp's No. A-5 Russell, Section 26-10-1e, is being rigged; A-6 Urania, 560 feet west and 440 feet south SE SE SE, is a derrick; No. 4 F. Tullos, SW NE SE Section 26-10-1e, is a rig; M-4 Urania, Section 19-10-2e, had sand at 1,486-90 feet and is waiting for a standard rig; No. M-5 cored the top of the sand at 1,580 feet and casing is being set on top of the sand and M-6 is being rigged. Pima Petroleum Co.'s No. B-7 Urania, Section 7-10-2e, is being bailed to test four feet of sand topped at 1,531 feet; a derrick is up for B-9 Urania, 700 feet north and 600 feet east SW cor. S. half NE, Section 7-10-2e.

Rochelle Oil Co.'s No. 1 Tremont, Section 30-10-2e, is being bailed to test sand at 1,527-35 feet. H. O. Rodgers' No. 1 Kenny, SE NE SW SW, Section 7-10-2e, is a derrick pattern. Six-inch casing was cemented at 1,502 feet at Shreveport Oil Corp.'s No. 1 Pendarvis. Section 26-10-1e. Taylor trustees' No. 5 Urania, NW SE SW Section 19-10-2e, is a rig. Six-inch casing was cemented at 1,495 feet at George W. Wetherbee's No. 5 Urania, Section 2-9-1e; 10-inch was set at 101 feet at B-1 Urania, Section 3-9-1e, and a derrick is up for B-2 Urania, NE SE SE, Section 3-9-1e. Wooten and associates' No. 1 King, Section 36-10-1e, is standing with a hole full of oil from eight feet of sand topped at 1,525 feet and is waiting for a standard rig. On the Winn Parish side of the Urania Field, Allen and associates' No. 2 Allen, SW E half SW SW, Section 23-10-1e, is a derrick. O. W. Clark's No. 9 Harper, Section 23-10-1e, is drilling at 50 feet; No. 10 at 90 feet. F. A. Shannon's No. 1 Albritton, Section 27-10-1e, is a derrick.

Monroe District

Another big producer was added to the Monroe gas field when Feazel, trustees' No. 1 Archer, Section 22-20-4e, was completed at 2,152 feet, making 37,000,000 feet of gas. Palmer Corp.'s No. 3 Cole, Section 43-19-4e, was finished in gas rock at 2,175 feet and gauged 5,-000,000 feet of gas.

Standard Oil Co.'s No. 1 Cooperage, Section 34-21-3e, is drilling in sand at 1,137 feet and losing returns. United Carbon Co.'s No. 1 Clarke, Section 26-20-5e, is drilling at 1,770 feet. Eight-inch casing was cemented at 832 feet and Central Co.'s No. 2 Kerr, Section 12-19-4e, is drilling at 868 feet. Gulf Refining Co.'s No. 1 West Virginia, Section 17-17-15, is waiting for cement to set at 210 feet where 12½-inch was set. Hatcher & Evans' No. 3 fee, Section 17-19-4e, is drilling at 2,117 feet. Ladell and associates' No. 34 fee, Section 6-19-5e, is drilling at 1,532 feet. Maury Drilling Co.'s No. 4 McErwin, Section 20-19-4e, is waiting for casing at 2,207 feet. Ouachita Natural Gas Co.'s No. 2 D' Arbone, Section 25-19-2e, is drilling in gas rock at 2,232 feet.

Eight-inch was cemented at 865 feet at Ouachita Gas Co.'s No. 7 Allison, Section 37-21-4e. Six-inch casing was cemented at 2,131 feet at Palmer Corp.'s No. 1 Lynch, Section 18-19-4e. George L. Pace and others' No. 1 Grang Pace fee, SW cor. SE SW, Section 30-17-1e, is a rig. Drillers are fighting a water flow at 265 feet at United Carbon Co.'s No. 1 Patton, Section 10-20-4e. Progress was halted at Arkansas Fuel Oil Corp.'s No. 1 Reeves, Section 14-20-1e, by a fishing job at 4,-390 feet. A rig is up for Gulf Refining Co.'s No. 1 Lizzie Nelson, 1,055 feet south and 300 feet NW cor Section 5-19-1e.

Webster Parish

Humble Oil & Refining Co.'s No. B-5 Bodcau, Section 13-21-10, was dry and abandoned at 2,521 feet. Louisiana Oil Refining Corp. abandoned the derrick for No. 3 Nelson, Section 28-21-10. Of the deep tests Humble Oil & Refining Co.'s No. 2 Cox, Section 22-21-10, is drilling lime at 4,073 feet. R. W. Norton's No. 1 Josey and Masey, Section 27-21-10, is drilling anhydrites at 4,178 feet. Ohio Oil Co.'s No. 4 Bank of Cotton Valley, Section 22-21-10, is drilling at 345 feet; No. 1 Cox, Section 23-21-10, is being delayed at 4,600 feet by a fishing job. Casing set at 4,650 feet was bailed dry at Smitherman & McDonald's No. 1 Oakley, Section 29-23-11, and the test is drilling in lime at 4,682 feet. Southern & Ramsey's No. 1 Munn, Section 1-22-10, is being delayed by a fishing job at 4,-620 feet. Palmer Corp.'s No. 1 Crichton, Section 30-20-8, is drilling in sand and lime at 2,398 feet.

ARKANSAS

Union County

One of the most significant of the completions in Union County during the week was the failure of the Sun Oil Co.'s No. 9 Brown, Section 8-18-15, to open up deep sand production in the El Dorado Field. The hole was junked and abandoned at 3,675 feet. Five completions were made in the Kenova district in Smackover. Ohio Oil Co.'s No. 11 Pate, Section 10-

(Continued on Page 132)

LOUISIANA WILDCATS DISAPPOINT; HAYNESVILLE TEST TO BE DEEPENED

By James H. Dameron

SHREVEPORT, La., Sept. 11.—Nine rank wildcat completions were recorded in the Louisiana-Arkansas district last week and all in Louisiana. None of the wildcat tests drilling unearthed anything of an exciting nature although numerous of the tests are getting down to interesting depths.

The Haynesville deep test which gives promise of reviving the old Haynesville Field with Trinity horizon production is to be deepened in an effort to make it flow.

Around Lawson in Union County, Arkansas, where excitement reigned when the Simms and Sun Oil Co.'s wildcat blew out, things have quieted down. The Walber and associates' test in that area does not look any too promising at the present because of the water encroachment and the Simms test is still trying to get returns. The next test due in that district and which will prove an important one is the Natural Gas & Fuel Corp.'s No. 1 Cordell, a southwest offset to the Simms test.

ARKANSAS

Union County

Bonderant and associates' No. 1 Garner, Section 8-18-12, is shut down at 2,204 feet for fuel. Six-inch casing was cemented at 2,650 feet at Matthews and associates' No. 1 Lewis, Section 14-19-12. Natural Gas & Fuel Corp.'s No. 1 Cordell, Section 9-18-13, is drilling at 1,400 feet. Simms and Sun Oil Co. are trying to get returns at 2,702 feet at No. 1 Simmons, Section 9-18-13. Salt water encroachment at Walber and associates' No. 2 Cordell, Section 6-19-13, is believed to be coming from behind the casing and 6-inch is being recemented at 2,967 feet. Wingfield and associates' No. 1 McGough, Section 22-17-13, is drilling at 1,245 feet.

Ashley County

Rhodes & Kirker's No. 1 Beldsoe, Section 20-15-7, is drilling at 2,798 feet.

Bradley County

Magnolia Petroleum Co.'s No. 1 Arkansas Timber Co., Section 33-15-11, is drilling at 2,595 feet. McMurry and associates' No. 1 Southern, Section 7-15-11, is shut down at 3,138 feet waiting for a drill stem. Wingfield and associates' No. 1 Southern, Section 2-16-12, is drilling at 2,270 feet. A derrick is being built for Phillips Petroleum Co.'s No. 1 Southern, Section 36-16-11.

Calhoun County

Delmar Oil Co.'s No. 1 Guidor, Section 16-11-14, is drilling in shale and boulders at 2,150 feet.

Drew County

McClintock & Goodka's No. 1 Olga, Section 35-13-5, is drilling at 2,655 feet.

Hempstead County

Frank S. Myers' No. 2 Nichols, Section 17-11-25w, is drilling at 2,255 feet.

Lafayette County

Arkansas Fuel Oil Co.'s No. 5 Allen, Section 18-19-24, is a rig.

Little River County

Greason and associates' No. 1 Waldrop, Section 4-13-31, is drilling at 1,490 feet. Mellick Oil Co.'s No. 1 Hawkins, Section 10-11-31, is drilling at 1,880 feet.

Miller County

Gulf Refining Co.'s No. 1 Dorsey, Section 27-17-26, is drilling blue gummy shale at 2,765 feet. W. D. Nash and associates' No. 1 Priest, Section 26-14-27, is shut down at 3,015 feet.

LOUISIANA

Bienville Parish

Woodley & Collins' No. 1 Thomas, Section 23-16-10, was dry at 1,740 feet and a water flow with a little gas was encountered at 1,743 feet. The test is to be deepened.

Bossier Parish

Two Bossier Parish wildcats went down as failures. Benton Syndicate's No. 1 Buckley, Section 9-20-13, north of Benton, was dry and abandoned at 1,475 feet. Woodley & Collins' No. 1 Antria, Section 4-21-11, west of Cotton Valley, was abandoned in salt water sand at 3,005 feet.

Claiborne Parish

Gulf Refining Co.'s No. 1 Crichton, Section 35-19-8, 8 miles east of Minden and in the Black Lake Bayou district,

(Continued on Page 82)

The 14 big advantages Halliburton cementing presents—

1 Provides a permanent and safe seat regardless of formation.

2 Protects casing against external pressures to such an extent that a Halliburton-cemented casing *has never been known to collapse.*

3 *Prevents corrosion* by keeping highly mineralized fluids away from casing.

4 *Prevents shifting formations* by forming a tight seal between wall of hole and casing.

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9 Makes it possible to set casing any distance from bottom, even though gas pressure is present.

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11 Brings gas blowouts under control.

12 Controls flow of gas when gas is used to stimulate production of oil [detailed information on this phase gladly given on request] and effectively kills gas wells too wild to be brought under control.

13 Detects sources of casing leaks, locates them and positively eliminates them.

14 Repairs split casing.

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Extension of Randado Pool to North

Bashara Well, Three-Quarters Mile From Nearest Production, Comes in Swabbing at Rate of 500 Bbls. a Day

By B. D. Stevenson
Staff Correspondent, Southwest Texas Fields

SAN ANTONIO, Tex., Sept. 13.—Proven territory operations in southwest Texas the past week got their best "kick" out of the three-quarter mile extension to the Randado Pool in Jim Hogg County when M. J. Bashara brought in his No. 1 Weil on Block 8 of Survey 81, three-quarters of a mile north of nearest production. It came in swabbing at the rate of about 500 bbls. a day at a depth of 1,925 feet to the top of the sand where casing was set. By the end of the week Shankle & Kori had completed their No. 1 Weil on Block 9 of Survey 81, a little to the east of the Bashara test. The size of the well was not reported but it is understood to be a good oil well and the depth to the top of the sand was 1,322 feet. Simms Co. first extended the Randado Field to the northeast last June, when it brought in No. 1 Weil in Block 16 of Survey 81, which is in the southwest cor. of the survey and it extended the field about three-quarters of a mile to the north. Survey 81 was owned by the Grayburg Oil Co., which checkerboarded it with the Simms Oil Co. and C. O. Maddox. The two new wells on Blocks 8 and 9 are on tracts owned by C. O. Maddox. The Randado Field is now, with this new extension over two and a half miles long and seven or eight locations wide at the widest point, equivalent to about a half mile. There is considerable undrilled territory yet and especially with this new extension. However, the field may also widen out since the Magnolia Co. with a line of producers along the east edge has not drilled any dry holes that would indicate the eastern limits, though the wells on that side are lighter producers.

Somerset Field

In the Somerset Field in Bexar and Atascosa Counties, Hamilton, trustee, has completed No. 13 Hughes in the southwest end of the Somerset Field and it will make about a 20-bbl. well, at about 1,700 feet. No. 14 has set and cemented casing and will drill in this week. Mike Glasscock completed No. 6 Sarah Smith at 1,480 feet, and it will make a 4-bbl. well.

Cole Gas Field—Duval County

Barkley-Meadows and Morgan have spudded in No. 2 King-Harper on their 40-acre tract in Survey 323, and have made location in Survey 323 for the No. 3 King-Harper. On Block 8, Survey 319, O. W. Killam is in sand at 1,778 feet in No. 5 Lopez, on Block 1, Survey 18 is standing at 3,901 feet. It had a salt water showing at 3,695 feet.

Piedras Pintas

Humble Oil & Refining Co.'s No. 6 Walsh has been placed on the pump, which caused a number of changes to be made in equipment, and a gauge of production is expected soon. No. 1 Becher on Survey 531, is drilling at 2,330 feet. Humble Company will undoubtedly drill another test as soon as No. 6 Walsh is placed on a gauge as well as the Magnolia which lost its test to the northwest.

Randado Field—Jim Hogg

Grayburg Oil Co. in the Randado Field in Jim Hogg County is drilling in sand at 1,315 feet in No. 6 Weil, in Block 15, Survey 81, and has made location for No. 7 Weil in the same block and survey, 225 feet from the south line and 150 feet from the east line. Johnson and others' have made location for No. 10 Palacious, and have derricks up for Nos. 11 and 12 Palacious, all in Survey 291. Houston Gulf Gas Co. in No. 12 Palacious in Survey 291, Block 11, is drilling at a little between 2,280 feet. Bashara-Maddox in No. 1 Weil on Block 8, Survey 81, at 1,322 feet, has a well that extends the field three-quarters of a mile north. On Block 9 of the same Survey, Shankle-Kori in No. 1 Weil, is in sand at 1,295 feet. In the Simms tract in Survey 291, Simms Oil Co.'s No. 13 Palacious is drilling at at 1,286 feet, and No. 4 Weil, Block 16, Survey 81, is fishing for 2-inch tubing at 1,305 feet. It has derrick up for No. 5 Weil on Block 16, 150 feet from the north line and 150 from the east line. Magnolia Petroleum Co. has set casing in No. 10 de la Garza on Block, 6 at 1,270 feet, and has also set casing at 1,274 feet in No. 11 de la Garza in the same block. Smith-Maddox in the northwest quarter of Survey 291, in No. 5 Palacious, are drilling at 750 feet, having spudded in on the last day of August, and have made location for No. 7 Palacious in the same tract, 450 feet from the south line and 615 feet from the east line. They have also made location for No. 8 Palacious, 450 feet from the south line and 150 feet from the west line.

Henne, Winch & Farris Pool

In Jim Hogg County in the Henne, Winch & Farr's Pool, the Magnolia Petroleum Co.'s No. 13 Killam-Martinez, Survey 276, is drilling at 1,115 feet. Humble Oil & Refining Co.'s No. 1 Vela, Block 5, Survey 5, is rigging up.

Kitselman & St. Albans Pool

On Block 20 the Associated Oil Co.'s No. 1 Lopez, cored oil at 2,147 feet but has a fishing job for the drill stem. Kitselman & St. Albans have temporarily abandoned No. 40 Holbien, at 3,191 feet. In No. 45 Holbien they have set casing and also in No. 46. Derrick is up for No. 47 and location has been made for No. 48.

Bruni Field—Webb County

Associated Oil Co.'s No. 3 Bruni, in Webb County on Block 44, is drilling at 1,687 feet. Stanley-Wynne on the west one-half of Block 18, in No. 18 Bruni, are in sand at 1,722 feet. Verdine and others', formerly under the name of Thrasher and others' on Survey 123, are drilling at 1,350 feet in No. 1 Bruni. In Survey 835, Harper and others' No. 1 Bruni is in sand at 1,656 feet. Ball-Murchinson & Fain's No. 8 Bruni Block 13, is setting casing.

Older Mirando Field

In the Mirando Field in Webb County the Alonzo Oil Producers Co.'s No. 7 Garcia, Survey 605, is drilling at 1,655 feet. Crown-Central's No. 10 Garcia in Survey 606, is drilling at 2,950 feet and No. 12 Garcia, in the same survey, is drilling at 750 feet. Location has been made for No. 3, in Block 27, 150 feet from the north line and east line, and for No. 44 in Block 28, 150 feet from the north line and east line. R. F. Duggan's No. 1 Garcia, Survey 592, 300 feet from south line and 150 feet from the west line, tested dry and drilled to 1,836 feet and tested again salt water and oil.

Carolina—Texas

Associated-Carson's No. D-3 Webster, south offset to the discovery well of the field in Survey 684, tested hot salt water at 2,612 feet, and No. D-4 in Survey 684, 150 feet north of the south line and 150 feet east of the west line has been temporarily abandoned at 2,550 feet. In Survey 684, the Associated Oil Co.'s No. B-1 Webster, which is 450 feet from the west line and 1,110 feet from the north line, is waiting on 10-inch casing at 257 feet. Its No. B-2 Webster, in the same survey, which is 810 feet to the north line and 1,160 feet to the west line and is the south offset to the Morgan Brothers-Killam-Suladie well, tested dry at 3,005 feet and is drilling deeper. The Texas Company's No. 2 Webster, in Survey 684, 810 feet from west line and 150 feet from the north line, has an oil sand at 2,597-2,602 feet and is going to test. Its No. 3 Webster, north offset to the Associated-Carson's No. D-1, got 8,000,000 to 10,000,000 feet of dry gas at 2,606 feet and is to drill deeper. Magnolia Petroleum Co.'s No. 1 Webster, Survey 684, 150 feet from the south line and 150 feet from the east line, made 8,000,000 feet of dry gas at 2,600 feet. Morgan O'Hern-Seacord, Survey 684 in their No. 1 Webster, which is 150 feet from the north and east lines made at 2,600 feet 7,000,000 feet of gas, and are to drill deeper. Morgan Brothers-Killam in Survey 684, 150 feet from the south and east line, is standing at 300 feet. Morgan Brothers-Daniel & Best in their No. 1 Webster in Survey 684, 1,470 feet to west line and 150 feet to the north line, are still waiting on water. Morgan Brothers, in No. 1 Webster, Survey 679, 150 feet to north and west lines, is ready to spud in. Moody Oil Corp.'s No. 1 Benavides, Survey 688, which is 150 feet from the west and south lines, has cored sandy shale at 2,031 feet. Hazlitt-Simmons Corp. in Survey 268, in the southwest one-fourth of Block 9, 337 feet from the south line and 323 feet from the west line, in No. 1 Barnsley, is standing in sandy shale at 1,968 feet. In No. 1 Benavides, drilling by U. S. Gas & Oil Co. in Survey 679, 160 feet to the north and west line, had 12 feet of good oil sand at 2,430 feet and are drilling deeper. Killam-Winch, Block 12, Survey 336 in No. 1 de la Garza, 150 feet to the south and east lines, had an oil sand at 3,018 feet and are reaming to set casing. Livingston- De Arkos in No. 1 de la Garza, Block 22, Survey 335, 200 feet from the south line and 440 feet from the west line, have made location and the derrick is up.

Ina Field

In the Ina Field the Texas Company has spudded in its first test on its leases in Medina County to the west a little of production and on the Viola Wilson farm. Arnett Oil Co. is still working with No. 4 Nixon, located to the southeast of its No. 3, and which got a log considerably different and with considerable oil bearing information. The bottom which went into salt water, is being plugged off and the well should be bailed soon. It looks to some like a better well than most of those in the Ina Field, and is a little deeper. Golden West Oil Co. is drilling its No. 3 Viola Wilson on the Eastham & Tarver lease. Magnolia Petroleum Co., which has completed No. 7 Schmidt in the proven district, is moving a rig over No. 5 drilled by the Ina Oil Co. before the lease was sold to Magnolia and will carry the well down for an Edwards lime test. It is now in the Navarro at about 1,000 feet.

MEDINA COUNTY IS MOST ACTIVE IN SOUTHWESTERN WILDCATTING

By B. D. Stevenson

SAN ANTONIO, Tex., Sept. 13.—Schermerhorn Oil Co. of Tulsa, after drilling two or three little wells of about 2 bbls. at around 800 feet on irrigation company land in Survey 31 in Medina County, southeast of Noonan last week, went into a much bigger showing of oil at around 1,646 feet which geologists say is coming from Serpentine, in or below the Georgetown. The well was not perfectly completed, as reported in last week's Oil and Gas Journal, when it was reported standing 400 feet in fluid, which the bailer, run every five minutes, was not lowering. Since then some estimated the water at about half. The well had casing set at about half the depth and set perforated casing in the bottom of the hole with blank casing above. Not having enough blank casing some perforated was put above the blank casing. There was a packer above the perforated casing in the bottom. The perforated casing above, however, prevented a good test. Since then the well has been worked over and the water has decreased and the hole was last reported standing 600 feet in oil. Oil is 32 gravity. In the Lytton Springs Field the Serpentine, which is the producing formation, is found above the Austin chalk. Several times Serpentine has been encountered in wells in Medina County but this is the first time the amount of oil indicated a probable well. It seems as though the Schermerhorn well still needs some work to make a full test of its possibilities. Probably this well better be determined by the next well drilled.

This well is one of the interesting wildcats in southwest Texas the past week. Medina County at this time is the most active in wildcatting of any county close around San Antonio and while good oil showings have been found the efforts have not been the most encouraging. This Schermerhorn well up to this time looks like it may possibly prove to be one of the best finds in the country. It is considerably removed from any production. The well is 10 miles east and a little north of the Ina Field and is about 15 miles west and a little north of the Somerset shallow field in Bexar and Atascosa Counties. The indication that a Serpentine plug or bed is somewhere in that territory is sure to insure a strenuous wildcat campaign, because the Lytton Springs Field, producing from about the same depth as the Schermerhorn well has proven a very profitable field.

To Make Further Test

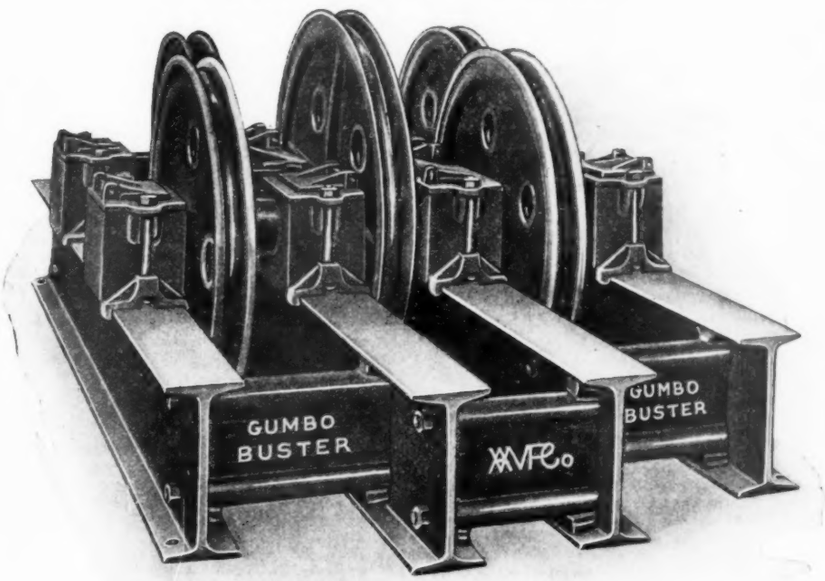
Another well in the Medina County district that has attracted attention is the Western Gas & Fuel Co.'s No. 1 Chandler, south of the four Adams gas wells of Henderson & Holden which is being abandoned at 1,043 feet making salt water and oil. When Henderson & Holden brought in their first gasser about 2 miles south of the Ina oil field it was considered significant. They have developed the field to four gassers with a combined production of about 50,000,000 feet. Drilling is getting started around the gassers to find oil. Western Gas & Fuel Co., drilling a little to the south, got salt water and oil at 1,043 feet. The gas wells are about 1,000 feet deep. Western Gas & Fuel Co.'s well is being reported as a salt water well making a little oil. Information from the office of the company is that there was about 4 feet of salt water sand below which was 100 feet of oil-bearing sand. The driller couldn't detect any seal between them but the company officials believe there must have been a seal. They were drilling for gas production to furnish gas for a 4-inch line to Hondo and have abandoned this test and moved north and northwest of the Henderson & Holden gas wells but plan to return later and drill on the Chandler lease and feel their way carefully through the salt water and hope to

(Continued on Page 128)

The Gumbo Buster Crown Block

Russian Model A

Safest and Strongest



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2. Can be used with an opening of 4½ feet through watertable.
3. Extra large, interchangeable, removable, self-aligning bronze bushings.
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5. Block can be raised to top of derrick in two sections.

The design and construction of this big crown block are in answer to the demands for a block to safely and efficiently handle the tremendous loads attendant on deep drilling.

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OKLAHOMA TEXAS ARKANSAS LOUISIANA

Deep Test In Pilot Butte Has Showing

Rotary Record in Big Muddy Field. Shaffer Dome, Utah, Now Considered Doubtful. Gas Flow on Garland Dome

By Frank B. Taylor
Staff Correspondent, Rocky Mountain Area

CASPER, Wyo., Sept. 11.—The Pilot Butte Oil & Gas Co., drilling a deep test in the Pilot Butte Field, Fremont County, has reached a depth of 1,825 feet and had a showing of shale oil at 1,146 feet that will make a commercial well, but was cased off. This well is being drilled as a test of the Frontier sands. The field produces a light oil from a shale sand lens and it has long been thought that a mother pool laid below the shale in either the Frontier sands or in the Dakota sands. The well is intended to test this theory.

The new well of the Producers & Refiners in the Hudson Field near Lander will make a producer good for 350 bbls. of black oil from the Embar sand. The same company shot one of the old holes at Hudson last week with 115 quarts and the well responded by doubling its production. The new producer is expected to start some work on the Dallas and Derby Domes to test the sands below the Embar. The Sage Creek, Hudson, Dallas and Derby and Sheep Mountain structures are all located on what is termed the Lander anticline. The oil is a black crude, asphaltic base and contains sulphur. The Hudson, Dallas and Derby fields have been found productive and are being produced; the Sage Creek has had several tests drilled but no commercial production and the Sheep Mountain has never been drilled. In case any of the fields find oil in a deeper sand as the Hudson Field did, the other operations should also find production in the deeper sands as the stratigraphy of all the structures is the same, with minor differences.

Oil Waterproofs Roads

The experimental use of the heavy oil from the Derby and Dallas oil fields on the streets of Lander has proved a success. It was found at first that one season's applications were not lasting and the placing of oil on the streets was continued each summer. After the second year it was noticed that the dust nuisance that was the original cause of the application of the oil, was practically abated but the gain in having waterproof streets at a comparatively low cost caused the city to continue putting oil on the streets. The real test came last summer when an unseasonal cloudburst brought the waters of the Popo Agie River up out of the banks and over the main streets. Houses were floated from their foundations, but the oiled streets resisted the penetration of the water and after the flood had receded, the streets were found in as good condition as before.

The oil is brought from the field by tank trucks equipped with a short piece of pipe drilled with holes and a suitable valve to deliver the tank's contents to the distributing pipe as wanted. The oil is not heated and the bottom settlings of the tanks in the fields are preferred to fresh crude from the wells. This is sprinkled on the streets direct and the traffic helps the penetration.

The Dallas and Derby crude is a black, asphaltic oil containing some gasoline content and also sulphur, at present Lander is taking the oil for its streets from the Derby Dome, but the crude from either field seems to have a peculiar property of being incorporated with the dirt surfacing of the streets to make a smooth surface that is both waterproof and resists wear more than other oils used in the same manner.

At a drawing held at Lander, L. J. Kirch of Riverton, was the lucky man to obtain a permit on 160 acres lying in the Elk Basin Field in Park County. This tract had so many applicants for it the land office decided to hold a drawing.

The Midwest Refining interests and the E. T. Williams Oil Co. obtained a decision in the Natrona County Circuit Court the past week in the case of Walter N. Bush versus the Midwest Oil Co., the Midwest Refining Co. and the E. T. Williams Oil Co. This case arose over a 40-acre tract in the Salt Creek Field, which the Bush interests claimed through an old placer claim on the section. The court ruled against the Bush interests.

Drilling With Rotary

The Continental Oil Co., drilling with a new type of rotary outfit in the Big Muddy Field, has set a pace for making hole that will probably remain the record for a long time to come. Roughly, the crew with this rotary outfit, made 2,000 feet of hole in 10 days without a mishap.

The rotary is driven from a Hild Differential Drive rig which in turn is electrically driven. This drive gear works on the principle of a differential in the back axle of an automobile, and is so arranged that a continuous pressure can be kept on the bit at the bottom of the hole, this pressure can also be adjusted to suit different conditions and strata. Runs of a foot per minute are common on this well and on one 9-hour run the tools made 441 feet of hole. The bit used on this well is also a new type of rotary bit, being the invention of A. M. Gildersleeve of Denver.

With the new drive and rotary tools, oil men are predicting a return to the rotary from the cable tools in this region. In the early history of the Wyoming oil fields, the rotary played an important part in putting down wells. In the hands of an experienced driller, the rotary made records that have never been equalled by the cable tools. The employment of green rotary drillers, however, is held largely responsible for the abandonment of that type of drill as many holes were lost or were too crooked to run a string of pipe in. The new style as used in the Big Muddy Field eliminates many of the chances for trouble found in the regular style rotary outfits and the holes are satisfactory. The great saving in time is expected to be a deciding factor in favor of the new type of drill.

Gas Flow on Garland

The Utah Southern Oil Co. found a heavy gas flow in the well on the Garland structure in the Big Horn Basin. This test is north of a fault that is supposed to shut off that part of the Garland structure from some wells drilled on the southern part and the gas from this well is quite wet, making the area look good for a gasoline extraction development. The sand was found at 2,044 feet and the flow has been shut in and a string of 10-inch casing will be set on top of the sand. The flow is estimated at 20,000,000 feet.

Utah Operations

In Utah, the Utah Southern Oil Co. and the Midwest Refining Co. have set a string of 6⅝-inch casing at 3,645 feet on top of a sand showing some oil, in the Cane Creek discovery well below Moab. It will be about a week before the casing will be tested and drilling resumed.

The John Shaffer well, on the Shaffer Dome, 5 miles south of the Cane Creek discovery well, is drilling at 2,340 feet in a gray sandy shale and no showing yet. The hole is caving badly and the casing will be lowered to bottom to shut off this cave. This well was considered to have the sand that produced oil at Cane Creek, at around 2,000 feet but so far the Shaffer Dome well has not shown any oil and it begins to look like a doubtful proposition. The Lockhart Canyon wildcat and the Cedar Mesa wildcat in which the Utah Southern Oil Co. is interested, are rigging up and ready to spud in. The Canyon well in San Juan County is shut down at 1,040 feet.

Colorado Developments

In Rio Blanca County, Colorado, The Texas Company spudded in on a wildcat on the Wilson Creek Dome. This well is expected to go below 5,000 feet as the Mesa Verde and lower Tertiary are quite thick and the production, if any, is probably in the Cretaceous sands which would lie under the Mesa Verde. The Texas Company well is starting with a 24-inch hole and will be drilled with both rotary and standard tools. The well is on Section 27-3-94, and the Wilson Dome is the third largest structure in the Rocky Mountain region in area covered. The closure is about 1,400 feet.

The Repollo Oil Co., drilling a wildcat near Boulder, Colo., is at 4,350 feet and no further showing of oil or gas after the one reported last month.

Salt Creek Completions

The Midwest Refining Co. completed 14 new producers in Salt Creek the past week. On Section 26-40-79, the Midwest Oil Co. drilled a well to the Lakota sand and went into the pay, the well flowed 170 bbls. in two hours and 10 minutes and was then shut in. The sand was found at 2,447 feet. The same company drilled two new producers on Section 35-40-79. One at 1,515 feet will make a pumper and the other will do 125 bbls. from the second Wall Creek sand at 2,185 feet.

The Midwest Oil Co. and the Wyoming Associated Oil Co. found production at 1,860 feet on Section 36-40-79, and the well will make about 25 bbls. The same firms have a producer in the second Wall Creek sand on Section 12-40-79, at 2,207 feet that will make a pumper.

The Wyoming Oil Fields Co. drilled a Lakota sand well on Section 25-40-79, and found the sand at 2,447 feet. The well was not drilled in, but shut down on top of the sand indefinitely.

The Wyoming Associated Oil Co. brought in a producer on Section 35-40-79, at 1,618 feet, that will make 40 bbls. The same company has a small pumper on Section 23-40-79, at 1,783 feet, and one on Section 24-40-79, at 1,611 feet that will make 20 bbls. On Section 34-40-79, the same company has a second sand well at 2,132 feet that will do 50 bbls. and on Section 2-39-79, the same firm has an average producer at 1,707 feet.

The Salt Creek Consolidated Oil Co has an average producer on Section 34-40-79, at 1,805 feet.

The Wyoming Oil Fields Co. has a 16-bbl. well on Section 23-40-79, at 1,805 feet.

Rock River Producer

In the Rock River Field in Albany County, the Ohio Oil Co. brought in a good producer in the Muddy sand at 3,515 feet, on Section 3-19-78, that started

(Continued on Page 110)

TWO PRODUCING SANDS ENCOUNTERED IN WELL SOUTHWEST OF CALGARY

By Victor Lauriston
Staff Correspondent, Canadian Fields

CHATHAM, Ont., Sept. 11.—In the Turner Valley Field, southwest of Calgary, interest is shown in the Home Oil Co.'s No. 1, LSD 10, Section 20-19-2w5, which recently got a small commercial oil production in the Dakota sand. Two producing sands were encountered, the first around 1,990 feet and the second at 2,090 feet. The well, in spite of considerable caving, has been bailing a reported production of 25 bbls. a day, and may be good for 40 to 50 bbls., the oil being around 40 to 42 degrees. The well is now at 2,110 feet, and will be continued as a deep test of the Madison limestone in this section of the field. It is planned to run 12½-inch casing to the bottom of the well and carry it on down behind the drill by underreaming for another 100 to 150 feet. The main features of the drilling thus far are shown in the log: 90 feet, water shut off with 20-inch; 1,106 feet, 15½-inch casing cemented; 1,570 feet, show of green oil and some gas; 1,990 feet, first producing sand, 2 feet thick, with amber oil 40 to 42 degrees; 2,092 feet, second producing sand, 8 feet thick, with dark green oil, 40 to 42 degrees, bailing 25 bbls. a day.

The company, after finishing this well as a deep test, will undertake commercial development of the Dakota production, which is the first crude oil production of importance secured in the Dakota sand.

McLeod Oil Co.'s No. 2, LSD 16, Section 1-20-3w5, is at 3,772 feet and drilling past the lost bit, with no indications of increasing gas flow. George H. Cloakey has resigned as managing director of the company, and W. E. McLeod and George Sammons are looking after the field work.

Diamond Drilling Test

Illinois-Alberta Oil & Refining Co., LSD 14, Section 12-20-3w5, is reported to have resumed work at 3,678 feet as a diamond drill test of the deeper formations. The test was carried to the present depth with cable tools, and is now on top of the Madison limestone, with 4¾-inch casing cemented. Oscar Johnson, of the Sullivan Machinery Co., Chicago, will operate the outfit, the present double crew, excepting one man, being required, the outfit running one shift. This is the first deep test in the Turner Valley Field to operate with a diamond drilling outfit, and it is planned to carry it, if possible, through the Madison limestone and below the horizon at which the Royalite No. 2 and McLeod No. 2 have secured their heavy wet gas production.

Vulcan Oils' No. 1, LSD 11, Section 13-20-3w5, is at 4,917 feet and drilling, after cementing the 6-inch casing in the top of the Madison limestone. The lost bit was recovered after the crew had drilled past it. At this depth there is some gas, but the quantity is small compared with wells in other parts of the field.

Dallas Oil Co.'s No. 1, LSD 11, Section 20-19-2w5, is down 3,100 feet and underreaming for 10-inch casing. The underreamer is at 3,030 feet and the 10-inch has been lowered to 2,460 feet. Ca-

(Continued on Page 104)

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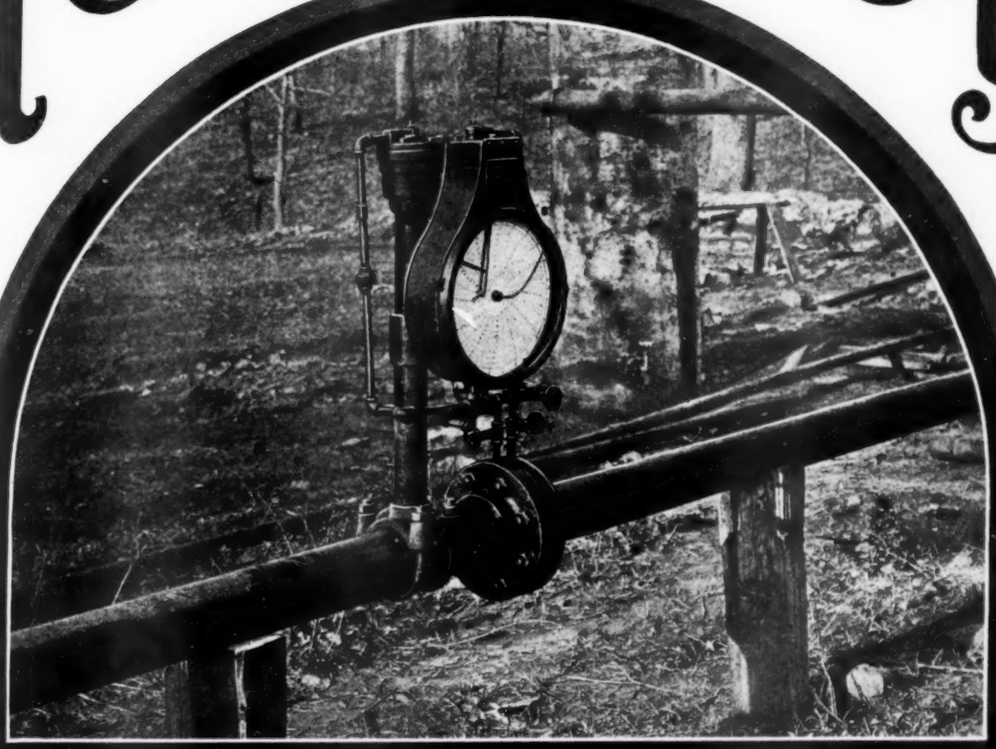

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Superior Sand May Not Be Prolific

Failure to Pick It Up in Extension of Huntington Beach. Drilling in Townsite Dependent on Deep Production

By L. P. Stockman
Staff Correspondent, California Fields

LOS ANGELES, Calif., Sept. 11.—Due to the fact that there were no completions registered in the southwest extension of Huntington Beach during the past week, there were few developments of interest in that area with the exception of the starting of several new wells and the failure of one or two others to pick up the Superior sand. This has had a rather depressing effect and, while some have visions of experiencing a condition similar to that in the northwest extension at Long Beach where not more than 60 or 70 per cent of the wells can be expected to pay out, this frame of mind is really not justified. It is quite true the Julian Petroleum's No. 1 Lambert and E. J. Miley's No. 1 Pacific Electric, finished a few weeks ago, suffered a rather severe drop in production but it is doubtful if this can be attributed to anything more than a normal decline. As a matter of fact, this Superior sand, which is believed to be comparable to the Bolsa zone in the older sections of the field, is not expected to be a prolific horizon as it will be recalled that the Standard passed up this sand entirely on its Lease B to the north of the town lot section.

Future drilling in the townsite area is dependent upon the productivity of the deep sand almost exclusively as it is quite evident that the Superior zone is not capable of sustaining town lot drilling. It is extremely doubtful whether the Standard, Petroleum Securities, Superior, E. J. Miley and the Julian Petroleum would have initiated their present large drilling program predicated solely upon the initial completion in the upper zone. These operators are of the opinion that a lower and more productive sand will be encountered in the southwest extension and it is understood E. J. Miley will not make any further attempt to secure production in the shallow zone but will drill direct to the lower horizon expected to be picked up somewhere between 4,000 and 4,500 feet.

Waiting on Test

There is only one well in the extension at the present time which might throw some light on the possibility of picking up a deep zone comparable to that found on the Standard's lease "B" but, due to to the attitude of the company involved, this information is being withheld. The well in question is the Wilshire Oil Co.'s No. 1 Huntington and operators throughout the field in general have assumed a rather hostile attitude as they maintain that it is useless expenditure to drill some 25 or 30 wells, particularly at a time when one hole is already approaching the depth at which the deep sand should lie. The Wilshire company has consistently refused to reveal the log of this well and, although a high board fence has been erected around the hole, a drill pipe count indicates that it is down approximately 4,050 feet. Considerable interest attaches to the Wilshire's present drilling program, which includes three wells in addition to No. 1 Huntington, and several operators are inclined to believe this is a favorable indication as the company would hardly run four strings of tools if the initial well was not running true to form.

E. J. Miley's No. 2 Pacific Electric, located approximately 800 feet southeast of his No. 1, is rotating ahead at 3,350 feet but, notwithstanding it is about 250 feet deeper than the top of the sand found in the latter, it has not yet picked up anything more favorable than a few thin streaks of oil sand. The McKeon Oil Co.'s No. 1 Huntington passed through the Superior sand but, as it did not look unusually promising, drilling was continued and the hole will be carried down in search of a more favorable horizon. George F. Getty is coring his Nos. 4 and 5 solid at 3,050 feet and it is expected a string of 10-inch will be landed within a day or so.

The Standard, which company has something like 20 tentative locations mapped in addition to the work already under way, should have several wells ready for production in the upper sand within a few days if the company decides to produce from this zone, as Nos. 1, 2, 3, 4 and 5 on the Huntington property and No. 1 Anderson are standing cemented just above the pay. The Superior should also list a new well or two as No. 1 fee, No. 1 Gilmore and No. 7 Gillette are all looking rather favorable. The California Petroleum, running five strings of tools, will cement No. 1 McIntyre, No. 1 Plavan and No. 1 Tubach within a few days. The Julian Petroleum and the Petroleum Securities have been rather slow in getting under way but each is expected to pursue a rather aggressive policy as soon as the preliminary work has been completed. The United Oil Co. has just finished rigging up No. 1 Ward and is building a rig for another well in the extension, No. 1 Buck.

Long Beach

Weekly production figures indicate that both the older section and the northwest extension at Long Beach have been declining consistently for several weeks and the aggregate production of the Long Beach Field has dropped below 100,000 bbls. daily for the first time since 1923 when this district was experiencing its primary upward swing. A check of conditions throughout the field indicates a further drop can be anticipated, although it will probably be quite gradual from now on. The completion of new wells will from time to time arrest the decline but the tendency will be decidedly downward, as the limits have been clearly defined for some time. There is a small strip along the southeastern part which will come in for a little play during the next few months but the area is too small to have any appreciable effect on future production. The San Martinez Oil Co. and the Julian Petroleum are drilling two or three wells in this spot and should, barring mechanical trouble, secure commercial production.

The northwest extension ceased to be an important factor in the Long Beach production several weeks ago and, although several wells in that area are in the oil sand, it is doubtful if their completion will receive more than a casual consideration, as they will probably all be small pumpers. E. L. Craigen's No. 2 Cerritos, redrilled and deepened to the lower sand at 4,812 feet, was put on the beam early in the week and started off pumping 120 bbls. of 21.2 gravity oil daily. Nathan Hale's No. 1 Cerritos, another recompletion after being redrilled and deepened to the lower sand, started off pumping 95 bbls. of 21.3 gravity oil from 4,790 feet. The Rio Grande Oil Co. did not succeed in securing a flowing well upon completion of No. 2 Law and, although it was swabbed and bailed for some time at 4,876 feet, failed to respond. It is being placed on the pump and will probably be in a position for a test within a few days.

Torrance

The Chanslor-Canfield Midway Oil Co., as a result of its work in the Torrance Field, added another producer in that area when No. 49 Del Amo was put on the beam a few days ago. This well, carried down to 3,650 feet and finished with an 8¼-inch oil string, is pumping 182 bbls. of clean 19.1 gravity oil daily. The company is running three strings of tools on this lease and has rigs up for two new wells, Nos. 44 and 60, which will probably be spudded in within 30 days.

The recent completion of a 582-bbl. well by the Shell and the introduction of dry gas into the producing horizon by both the Union and Shell has resulted in a slight increase in the daily production of the Dominguez Field during the past two weeks. A preliminary check indicates that this conservation work will prove a successful undertaking in this field as utilization of this dry gas has increased the production practically 10 per cent, raising the total output from 20,000 bbls. daily to approximately 22,000 bbls. The Union experienced a very busy week in Rosecrans where two new wells were finished, one on the Rosecrans lease and another on the Howard Park property. No. 8 Rosecrans, the largest, came in flowing 621 bbls. of clean 30.3 gravity oil daily from 4,950 feet. No. 29 Howard Park was a shallow completion at 3,998 feet, from which it is making 240 bbls. daily.

Seal Beach

The Marland's discovery well at Seal Beach, No. 1 Bixby, showed a very gratifying increase in production during the past week, from 1,250 bbls. daily to 1,977 bbls. per day without any change being made in the size of the flow nipple. It will be recalled this well blew in prematurely while a water test was in progress and that only 20 feet of sand has been opened up. The well has been on production for approximately a month and instead of registering a normal and anticipated decline, has shown an increase in production of more than 50 per cent. The first well in a new field is, of course, always the best in as much as the sand has but one outlet and the gas, in following the lines of least resistance, opens up channels which radiate from this point. It is believed the Marland and Standard will each spud in a new well during the coming week, as the former is rigging up No. 1 Selover, and the lat-

(Continued on Page 80)

IMPORTANT SOUTHERN CALIFORNIA WILDCATS

Company, Well, Location—	S-T-R	Depth	Status
Union, No. 1 Bryant, Seal Beach	2- 5-12	5,343	br. sh. drilling
Bellflower, No. 1 Blythe, Bellflower		Rig	spud soon
Marine, No. 1 Strong, Bellflower	24- 3-12	4,670	gr. sd. drilling
Feather & Preston, No. 1 Blinn, Clearwater	16- 3-12	3,587	fishing
Union, No. 1 Howland, El Segundo	24- 2-15	5,118	sd. sh. drilling
Smith Pet. Co., No. 1 Johnson, Hawthorne	17- 3-14	3,798	hd. sd. drilling
Associated, No. 1 Cypress, Inglewood	34- 2-14	3,300	sh. gr. sd. drlg.
Dominguez Exten., No. 1 Compton, Dominguez	27- 3-13	Rig	rigging up
Riner, H. E., No. 3 McDermott, San Bernardino	32- 2- 8	Rig	rigging up
Julian, No. 1 Trust, Manhattan	19- 3-14	5,685	slight show
Milham Expltn., Well No. 2, Del Rey	34- 2-15	6,058	fishing
Barnsdall, No. 1 Merlo, Puente	35- 1-11	4,450	sd. sh. drilling
Petroleum Sec., No. 1 Seamon, San Fernando	14- 2-16	3,505	sd. sh. drilling
Standard, No. 1 University, San Fernando	15- 2-15	3,825	hd. sd. drilling
Standard, No. 1 Austin, Topango	11- 1-17	1,450	hd. sd. drilling
Union, No. 1 Saugus, Saugus	15- 4-16	3,817	fishing
Union, No. 2 Olinda, Orange Co.	10- 3- 9	5,325	unfavorable
Oceanside Oil Co., No. 1 Pacific, San Diego	23-11- 5	Rig	rigging up
Halfhill Packing Co., No. 2 Jeffries, Burbank	2- 1-15	1,250	suspended
Sou. Calif. Drlg. Co., No. 1 Matteson, El Segundo	1- 3-15	Mxtl.	building rig
Calif. Pet. Dev., No. 1 Spitz, Capistrano	2- 8- 8	2,010	gr. sd. drilling
Petroleum Sec., No. 1 De Baker, Bandini	18- 2-12	Timbs.	erecting rig
Van Nuys, No. 1 Community, Van Nuys		3,701	cemented

IMPORTANT NORTHERN CALIFORNIA WILDCATS

Union, No. 2 Theta, Kern County	23-28-20	1,448	survey hole
Taylor, W. W., No. 1 Clovis, Fresno County	5-13-22	1,202	hd. sd. drilling
Associated, No. 2 Huron, Fresno County	20-19-17	Rig	survey hole
Federal Expltn., No. 1 Kinsella, Tulare Co.	15-22-24	1,955	cem'td 12½-in.
Bolsa Chica, Well No. 1, Kettleman	30-23-19	2,340	bld. 25 bbls. oil
Marland, No. 1 Elliott, Kettleman	12-22-17	5,570	fishing
South Coalinga, Well No. 1 Kettleman	35-24-19	1,335	bl. sh. drilling
Shell, No. 1 Berlywood, Moorpark	32- 3-20	6,100	unfavorable
C. C. M. O., No. 1 Hobson, Ventura Co.	22- 3-24	5,855	bad fishing job
Milham Expltn., No. 1 Sexton, Ventura Co.	19- 3-22	6,017	set 6⅝-inch
Milham Expltn., No. 1 Buttonwillow, Kern	8-28-23	Rig	rigging up
Standard, No. 1 Palmer, Santa Barbara	13- 9-23	2,820	set 8¼-inch
Standard, No. 1 Carmarillo, Ventura Co.		2,416	conglom. drlg.
Standard, No. 1 McGrath, Ventura Co.	18- 2-22	2,131	survey hole
Pan American, No. 1 White, Monterey Co.	27-23-13	2,410	little gas
Pyramid, No. 1 Trescony, Monterey Co.	26-21- 9	2,770	fishing
Shell, No. 1 Murphy, Petaluma	29- 5- 6	2,480	hd. sd. drilling
Miley Expltn., No. 2 Casitas, Ventura Co.	7- 3-25	604	hd. sd. drilling
Miley Expltn., No. 1 Goleta, Santa Barbara			location
Rio Grande, No. 1 Canet, Ventura Co.	9- 3-23	1,500	bl. sh. drilling
Sentinel, No. 1 Tejon, Ventura Co.	5-.5-17	562	suspended
Woodward & Sheedy, No. 1 Famosa, Kern Co.	29-27-26	Rig	rigging up
Henderson Pet., No. 2 Piru, Ventura Co.		721	hd. sd. drilling
Ozena, No. 1 Allensworth, Tulare Co.	26-24-24	Rig	rigging up
Union, No. 1 Gill, Famosa	8-28-27	Rig	rigging up

TANKER SHIPMENTS FROM LOS ANGELES TO ATLANTIC AND GULF COAST PORTS

Commodity—	Total This week	Daily Average	Total Last week	Daily Average	This year To date	Same time Last year
Crude oil	154,956	22,136	321,184	45,883	8,517,729	11,170,026
Fuel and gas oil	703,013	100,430	343,390	49,056	7,424,445	237,873
Gasoline	245,077	35,011	89,822	11,546	5,017,409	5,871,462
Tops					74,619	484,650
Coastwise—						
Crude oil	420,819	60,117	297,304	56,758	16,127,618	22,250,018
Fuel and gas oil	83,064	11,866	405,838	57,977	7,662,167	7,964,362
Gasoline	267,707	36,815	163,991	23,427	5,216,028	3,304,369
Kerosene	4,377	625			175,041	244,136
Tops					620,124	128,986
Exports—						
Crude oil	156,024	22,289	123,943	17,706	3,918,660	1,786,864
Fuel and gas oil	656,263	93,752	385,030	55,004	12,556,062	10,717,246
Gasoline	50,831	7,262	83,163	11,880	3,649,533	2,829,543
Tops						170,407
Kerosene	20,177	2,882	152,830	21,833	1,760,110	1,684,785
TANKER SHIPMENTS FROM SAN FRANCISCO TO ATLANTIC, GULF COAST PORTS						
Fuel and gas oil	145,674	20,811	73,968	10,567	1,104,624	218,414
Gasoline	72,986	10,427			758,222	943,485
Tops					229,775	794,918
Lubricants					275,617	235,533
Coastwise—						
Fuel and gas oil	48,715	6,959	70,659	10,094	3,004,536	2,405,451
Gasoline	35,955	5,136	97,990	13,999	3,183,015	1,823,187
Kerosene	1,969	281	3,654	522	276,582	143,822
Exports—						
Fuel and gas oil	64,627	9,232	123,697	17,671	2,355,678	1,688,470
Gasoline					1,166,681	459,361
Kerosene			97,429	13,918	1,462,561	723,316
Lubricants					8,759	243,429

THE BABY DIGGER

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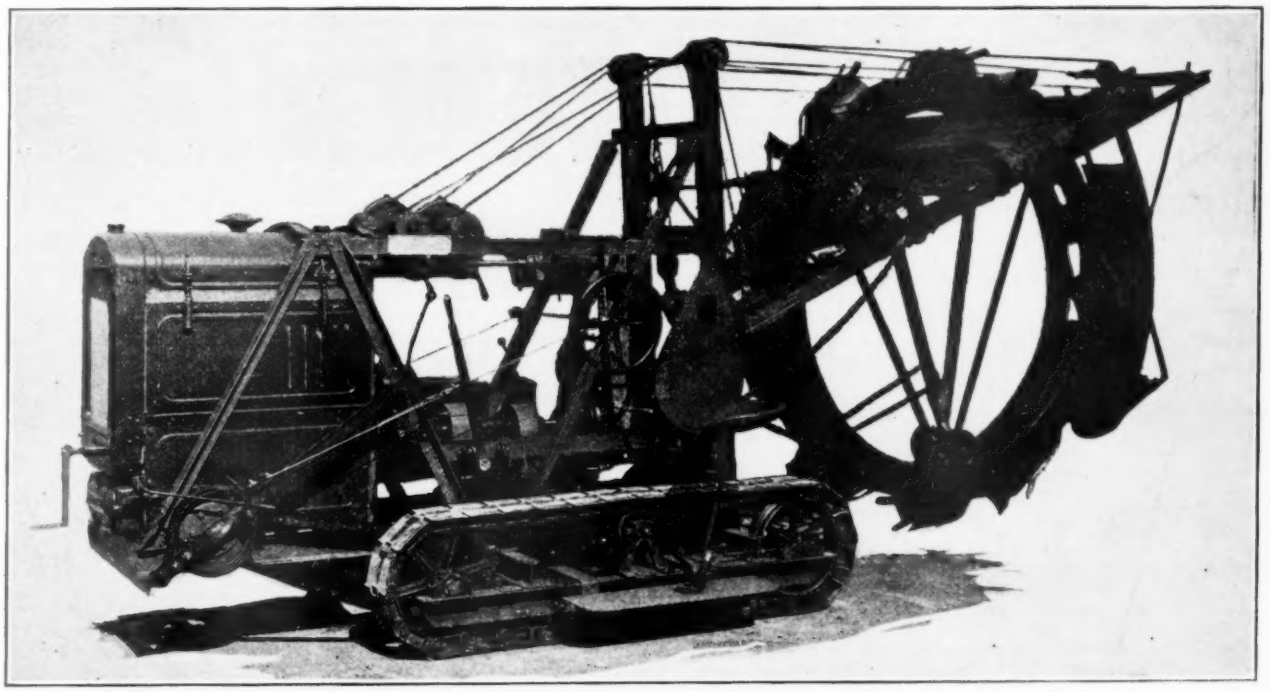

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Southeast Ohio Has Good Producers

Sunday Creek Coal Co. Gets 202-Bbl. Well in Perry County and East Ohio Gas Co. 152-Bbl Well in Holmes County

By D. S. Wakenight
Staff Correspondent, Eastern Fields

PITTSBURGH, Pa., Sept. 13. — In good producers of oil and gas the deep sand territory in southeastern Ohio furnished the most. For better than average producers, West Virginia and southwest Pennsylvania had an off week, completing light pumpers. Except in the gas areas there is very little doing. In proven territory the gas companies are getting active in anticipation of the increased demand that will come during the winter months.

At the present time Lincoln, Kanawha and Boone Counties in West Virginia and Guernsey County in southeast Ohio are the most active. There is still a lot of territory that can be developed when the market is favorable.

Best Producers for Week

Southeastern Ohio had more than the usual number of good completions during the past week. In the northwest quarter of Section 34, Coal Township, Perry County, the Sunday Creek Coal Co. got one of the best producers completed in a number of months when it completed and shot in the Clinton sand its No. 138 on its own property. The well produced 202 bbls. the first 24 hours. There is some importance attached to its location. The nearest producing well is the Ohio Fuel Supply Co.'s No. 2 on the Franklin County Bank's property, one-half mile to the southwest. The size of the well makes it look promising for more good producers to the southwest of the pool proper.

The next best producer is the East Ohio Gas Co.'s second test on the John R. Hastings farm, located on Lot 25, Hardy Township, Holmes County. The first 24 hours after completed and shot in the Clinton sand it produced 152 bbls. The total depth of the well is 3,300 feet. In Lot 9, same township and county, the Empire Gas & Fuel Co.'s No. 3 placed 80 bbls. to its credit the first 24 hours after shot in the Clinton sand, on the James P. Close farm.

In Section 10, Hopewell Township, Licking County, J. H. Sole and others completed a second test on the William Coome farm. It produced 85 bbls. the first 24 hours after shot in the Clinton sand.

Gassers in Guernsey County

Guernsey County is coming rapidly to the front as a producer of gas. Better gassers are found in Guernsey County than in any other part of the Buckeye State or West Virginia. In Section 21, Adams Township, the Ohio Fuel Gas Co. is the most active in development work. As reported last week, this company's No. 3 on the W. L. Ford farm and a test on the J. H. Mahaffey farm when drilled into the Niagara lime were good for 11,000,000 and 10,000,000 feet, respectively. This county is leading all others in southeast Ohio in active development. In this county at the present time there are 35 rigs up and wells drilling.

All of the best wells in southeastern Ohio are located in the deep sand territory. In Lot 25, Hardy Township, Holmes County, the East Ohio Gas Co. has completed and shot in the Clinton sand a second test on the John R. Hastings farm. The well produced 152 bbls. the first 24 hours after shot. In Lot 7, Monroe Township, the Ohio Fuel Gas Co. has completed a test on the J. H. Shankland farm. It is a fair gasser in the same formation.

At Bolin Mills, Section 5, Knox Township, Vinton County, Cameron & Co. has completed a test on the Cameron S. Clark farm. It is a gasser in the Berea grit good for 500,000 feet. In the northwest quarter of Section 21, Fallsbury Township, Licking County, Sterl C. Brown has completed in the Berea grit a test on the H. A. Noland farm. It produced 18 bbls. the first 24 hours after shot.

Washington County

In Section 53, Salem Township, Washington County, L. B. Clymer & Co. completed No. 5 on the William L. Schramm farm. It is a duster in the Macksburg 500-foot sand. Near Lower Salem, Section 8, same township, J. C. Carner & Co.'s test on the Enan Williams farm is a duster in the Berea grit.

On the east side of Newark City, in Section 16, Madison Township, Licking County, W. W. and A. T. Wehrle have completed a second test on the M. Stansel farm. It is a natural producer good for 20 bbls. a day in the Big Lime formation. In the southeast quarter of Section 22, Fallsbury Township, the Leonard Oil & Gas Co.'s No. 3 on the Hoover Brothers' farm produced 15 bbls. the first 24 hours after completed and shot in the Berea grit.

In the southwest quarter of Section 11, Fallsbury Township, the Ohio Fuel Supply Co. has completed in the Berea grit a test on the Lewis Ramsey farm. It is a light gasser. In the southwest quarter of Section 1, same township, the Goshen Oil Co. completed a second test on the C. E. VanWinkle farm. It produced 18 bbls. the first 24 hours after shot.

In the southwest quarter of Section 30, Independence Township, Washington County, the Reno Oil Co. completed in the Big Injun sand a test on the H. C. Webber farm. It is a light gasser. In Section 23, Ward Township, Hocking County, Bell & Shull have started to drill a test on the Job Dawley heirs' farm. This location is 1,500 feet north of the Ohio Fuel Supply Co.'s second test on the Sarah A. Dawley farm.

In the northwest quarter of Section 19, Clay Township, Knox County, Roy B. Decker and others have completed a test on the Ira Burkholder farm and is a very light pumper in the Berea grit. In Hanover Township, Licking County, the Edward H. Everett Co. has drilled a second test on the T. H. Walcutt farm into the Clinton sand and showing for a small pumper. In Section 10, Perry Township, the Hope Construction & Refining Co. has started to drill on the Frank Phillips farm.

Week-End Completions

Just at the close of the week the deep sand territory in southeastern Ohio came to the front with another good producer. It is the Preston Oil Co.'s test on the Almeda Linton farm, located in the southeast quarter of Section 24, Green Township, Hocking County. The first 24 hours after drilled through and shot in the Clinton sand it produced 100 bbls.

In Lot 24, Newton Township, Licking County, the Ohio Fuel Supply Co. completed in the Berea grit a test on the Clinton S. McKinney farm. It is a duster. In Section 1, Liberty Township, Monroe County, E. W. Smith and others completed in the Cow Run sand No. 30 on the F. Weber farm. It is good for 2 bbls. a day.

In Lot 30, Athens Township, Athens County, the Athens State Oil & Gas Co. has completed in the Berea grit No. 3 on the State Lands good for 7 bbls. a day. In Section 31, Deerfield Township, Morgan County, Ralston & Maynard have completed in the same formation No. 15 on the Skeens McCarty farm. It is good for 20 bbls. a day, which is better than the average Berea grit well.

West Virginia Completions

At the close of the week of development work, the West Virginia fields had few completions. In Clinton district, Marion County, the Pittsburgh & West Virginia Gas Co.'s test on the Roscoe Eakin farm is a duster in the fifth sand. In Battelle district, Monongalia County, the same company's test on the Jasper Shreve farm is dry in the Bayard sand at a total depth of 3,327 feet.

In Eagle district, Harrison County, the Clarksburg Light & Heat Co. has a gasser in the Speechley sand at a test on the A. M. Morrison farm. In Center district, Gilmer County, McIntosh & Miller have a gasser in the Maxon sand at a test on the L. H. Holt & Co. farm. In Center district, McCall & Co. have a 5 bbl. pumper in the salt sand at a test on the Carey Mollohon farm. In Harper district, in Roane County, the United Fuel Gas Co.'s test on the I. B. Davis farm is a gasser in the Big Injun sand.

In Section 19, Franklin Township, A. J. Weidman & Co. have completed in the Berea grit No. 4 on the R. T. Tavener farm. It is not good for more than 3 bbls. a day. In the southwest quarter of Section 35, Falls Gore Township, in Hocking County, Graham & Co. have completed in the Berea grit No. 8 on M. and J. T. Hite farm. It is a duster. In the central part of Section 10, Newport Township, Washington County, Charles Daily & Co. have completed in the first Cow Run sand a test on the Carl Pool farm. It also is a duster.

In Lot 30, Athens Township, Athens County, Clark & Co. have completed in the Berea grit a test on the E. Lash farm. It is a gasser good for 250,000 feet. In Lot 14, Hanover Township, Licking County, the Hope Construction & Refining Co. is starting No. 14 on the Jacob Vandenbark farm.

In the southwest quarter of Section 28, York Township, Morgan County, the Pure Oil Co.'s No. 8 on the R. E. Hughes farm is good for 10 bbls. a day in the Berea grit.

New Work

In Section 17, Madison Township, Perry County, the Hope Construction & Refining Co. is building the rig for a test on the J. McCullough farm. In Section 18, Hopewell Township, Muskingum County, the Midland Oil Co. has a rig up on the E. M. Denny farm. In Section 26, Falls Township, Hocking County, the Calico Ridge Oil & Gas Co. is due in the Clinton sand on the Funk farm. In Starr Township, the Preston Oil Co. is due in the same formation at a second test on the George F. Wyskiver farm. In Ward Township, the Kachelmacher estate is drilling a test on the Hogan-Murphy farm.

West Virginia

On Reedy Creek, Reedy district, Roane County, West Virginia, the Heck Oil Co. has completed in the Berea grit No. 3 on the E. S. Warren farm. It is a natural producer good for 15 bbls. a day. At the headwaters of Meathouse Fork, Greenbrier district, Doddridge County, the Hope Construction & Refining Co. has drilled down from the Gordon to the fifth sand No. 5 on the J. H. Cunningham farm. Its production was increased from 2 to 15 bbls.

Pleasants County

In Jefferson district, Pleasants County, Teel, Waldschmidt and others have completed a test on the E. A. Nolan farm. It found no oil in the Maxon sand, but

(Continued on Page 112)

INTERESTING WILDCAT VENTURES IN KENTUCKY-TENNESSEE FIELD

By Whit
Staff Correspondent, Kentucky-Tennessee

GLASGOW, Ky., Sept. 11.—A general survey of the Kentucky petroleum regions shows that in the western division the bulk of the work under way is confined to the Glasgow Field of Barren County and the Owensboro district of Hancock, Ohio and Daviess Counties, while in the eastern division the work is well scattered over Lee-Owsley, Estill, Lawrence, Johnson, Magoffin and Floyd Counties. The late wells in any of these counties during the week were only ordinary producers, the best being on the Jones farm, in Barren County, with an initial of 30 bbls., and a 25-bbl. well on the Allie Evans farm, in the Owensboro district, other wells ranging from 3 to 20 bbls.

A few interesting wildcat ventures are being started in Kentucky and the extension of the Paragon Development Co.'s pipeline from the Kettle Creek area to the new development work to the south across the state line into Clay County, Tennessee, means a large amount of test work on the Tennessee side. Some wonderful shallow sand producers have been found near Celina and Willow Grove in this county, and the connection of the wells to pipelines means much for that county. It is reported that within three weeks oil will be going through the new extension and then Clay County operators will start their first sales of crude that will eventually take a large amount of cash into that county.

In southeastern Kentucky, the Petroleum Exploration Co. is moving a rig on the Helton lands, on the Indian Creek structure where the first of a series of deep tests will be made in that part of Knox County. This company secured a lease on the 3,000-acre tract known as the North Jellico tract and has secured considerable acreage bordering the big tract. Several other large companies have also secured holdings on this structure and contemplate testing out their acreage.

To Drill Deeper

No reports have been received from the drilling well of the Petroleum Exploration Co., on the W. E. Denton farm, in Christian County and if no shallow pay is encountered the well will be drilled to test out lower and unknown formations in that county which is to the west of the Allen and Warren County producing areas. It is figured by the company that an oil sand should be encountered around 1,000 feet. Several tests have been made in the county and in most every instance showings of oil have been found but never were tested out. The Petroleum Exploration Co. is drilling this test on a block of 5,000 acres. The third important test of this company is located on the Will Howard 138-acre farm, in Ohio County, which is in the Owensboro district, a part of a block of several hundred acres, near Whitesville.

(Continued on Page 116)

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CONTINENTAL

Lima Well Makes 140 Barrels Natural

New Development in Auglaize County Promising. Three More Average Producers Completed in Saginaw Field

By Whit
Staff Correspondent, Central West Fields

FINDLAY, Ohio, Sept. 13.—The outstanding features of the week in the Central West Field were the bringing in of a 140-bbl. natural producer on the Chambers farm, Biglick Township, Hancock County; a 30-bbl. pumper on the Clem Enneking farm, Jackson Township, in Auglaize County; a 20-bbl. pumper on the south shore of Maumee Bay, in Oregon Township, Lucas County, on the Gertrude Niles farm and one of the same caliber on the Fountain farm, Liberty Township, Hancock County, all in the old Lima Field of northwestern Ohio.

In the Saginaw Field of Michigan, three new wells have been completed, ranging from 20 to 35 bbls. initial production. One was on the J. Conrad Brechtelsbauer farm, which is an extension of the field to the northeast approximately one-fourth mile, the other two being in defined limits.

Indiana and Illinois Fields have no real feature for the week, although there are a number of wells due for completion in the Wabash County, Illinois, area as well as in the Berne Field, in Adams County, Indiana.

Lima Field

Quite a little excitement prevails in Findlay and the eastern part of Hancock County, over the bringing in of a 140-bbl. initial producer by the Ridge Oil & Gas Syndicate in its No. 3 well, 700 feet from the north line and 600 feet from the east line of the C. S. Chambers farm, Section 35, Biglick Township, Hancock County, 11 miles almost directly south of Fostoria, 11 miles east and 2 miles south of Findlay and close to the Hancock-Wyandot County line where Ridge Township, of the latter county joins Biglick. Top of the Trenton was found at 1,389 feet and the big pay at 68 feet in the sand at a total depth of 1,457 feet. It is the best producer found in the old Lima Field of northwestern Ohio, since the bringing in of the big well near Latcha, Wood County, 5 miles south of Toledo. Several wells have been drilled in Section 35, Biglick Township, but this is the first one that caused any real excitement and more activity is due for the area.

It is evident that the old producing territory of Hancock County is by no means drained as J. T. Montgomery's No. 24 well, 1,320 feet from the south line and 660 feet from the west line of the William H. Fountain farm, in the NW half of SE. Section 3, Liberty Township, pumped 20 bbls. the first 24 hours' gauge without pumping off. Top of sand at 1,323 feet and drilled to a total depth of 1,404 feet, or 81 feet in the sand. In Eagle Township, the Keiser Oil Co.'s second well in the southeast corner of the Joe Ernst farm, mapped as the Abe Foltz farm, in the SW half of Section 31, pumped 5 bbls., sand being topped at 1,332 feet and 73 feet in the sand. In the same township and southwest of Findlay along the Dixie highway, R. T. Rittenhouse drilled in his No. 5 well, 600 feet from the south line and 200 feet from the east line of the Frank Freed, mapped as the P. M. Foltz farm, in the NW half of Section 6, good for 10 bbls. at a total depth of 1,390 feet, or 75 feet in the sand.

In the DeVerna Pool, several miles south of the historical town of Perrysburg, in Perrysburg Township, Wood County, the Oko Oil & Gas Co., of Lima, Ohio, has brought in an excellent producer in its No. 7 in the northeast corner of the George DeVerna farm, in the SE half of Section 29. Sand was topped at 1,241½ feet and drilled 50 feet in the sand, where it was put on the pump and during the first 24 hours of slow pumping put 42 bbls. in tanks without lowering the fluid in the hole, after which the well would make spasmodic flows. Its production could have been more than double what it was but the owners handled the well with good judgment so as not to roil the crude by a long fast stroke. Same company's No. 4 well, 850 feet from the south line and 250 feet from the west line of the J. J. Heilman farm, in the NW. Section 28, same township, pumped 5 bbls. initial, the sand being struck at 1,241 feet and drilled 41 feet in the sand, the pay being found higher than in the DeVerna well. In Lake Township, same county, Lantz, Schulte and others' third well, 600 feet from the south and east lines of the H. C. Michaelson farm, in the SW of Section 26 and not far from the gusher recently completed in the same section, did but 1 bbl. Top of sand in this well at 1,270 feet and drilled 38 feet in the sand.

New Auglaize Pool

In Jackson Township, Auglaize County, the Rock Oil Co. made a nice strike in its second test, 700 feet from the north line and 250 feet from the east line of the Clem Enneking farm in the SW of Section 29, the well showing a production of 30 bbls. the first 24 hours from a total depth of 1,287 feet, or 47 feet in the sand, which was topped at 1,240 feet. This is by far the best well found in this new development and may lead to quite an interesting pool.

The Ohio Oil Co.'s No. 8 in the southwest corner of the E. Snavely farm, in the SW of Section 3, Center Township, Mercer County, struck top of sand at 1,110 feet and drilled 82 feet in the sand, the well showing 10 bbls. first 24 hours' gauge. In Jefferson Township, same county and northwest of Celina, Dave A. Miller and others' No. 5 well, 250 feet from the south line and 900 feet from the east line of the Hacker heirs farm, in the NE half of Section 33, struck sand at 1,101 feet and went to a total depth of 1,144 feet, or 43 feet in the sand, getting a 10-bbl. pumper.

Considerable territory south of the Maumee Bay, in Oregon Township, Lucas County, and southeast of Toledo, is still looking well worth the drilling. The Ohio Oil Co. brought in a 20-bbl. pumper at its No. 44 well, 1,250 feet from the north line and 700 feet from the west line of the Gertrude Niles farm, in the NW of Section 29, at a total depth of 1,455 feet, or 82 feet in the sand. In Monclova Township, same county, the Waterville Gas & Oil Co.'s No. 8 well, 500 feet from the north line and 2,400 feet from the west line of the George Ward farm, mapped as the P. Eicher farm, in the NW of Section 16, pumped but 1 bbl. initial, with top of sand at 1,208 feet, and drilled 60 feet in the sand.

In Benton Township, Ottawa County, near Graytown, Gladieux & Harmon's second test, 200 feet from the north line and 600 feet from the east line of the William F. Nissen farm, better known as the John Stange farm, in the NE of Section 31, pumped 8 bbls. initial. Sand struck at 1,332 feet and drilled 28 feet in the sand. In the Elmore Field, in Harris Township, same county, the Ohio Oil Co.'s No. 3 on the A. F. Alyn farm, Section 19, pumped 12 bbls. initial at a total depth of 1,386 feet, or 119 feet in the Trenton sand.

In the Roundhead Field, in McDonel Township, Hardin County, the Roundhead Oil & Gas Co.'s No. 6 well, 750 feet from the north line and 1,000 feet from the east line of the Elizabeth McArthur farm, pumped 15 bbls. initial, with sand topped at 1,438 feet and oil at 50 feet in the sand. The Hardin Oil & Gas Co.'s No. 7 on the A. R. Zimmerman farm, same area, is reported showing around 20 bbls. initial.

In Mississinewa Township, Darke County, the Cole Oil & Gas Co. drilled in a 2-bbl. pumper in its No. 6 in the northwest corner of the James Snyder farm, in the SW of Section 11, at a total depth of 1,278 feet, or 47 feet in the sand.

Central Ohio

The heaviest downpour of rain seen in central Ohio for a number of years prevailed Saturday swelling all streams and ditches to overflowing and doing a great damage to growing crops. Between Columbus and Toledo, the fields looked more like lakes than farm land, and the rain was such that one on a train could not see the fences less than 50 feet away. Between Toledo and Cleveland it was reported that more than 50 automobiles were in ditches or put out of commission on the main highways between the two cities. It has also caused a shut down of oil and gas development in many areas.

There were ten wells reported completed in the Central Ohio Field proper and the two in the Guernsey County Field, in Adams Township, that show the Cambridge Field to be the greatest gas find in Ohio for years. Both wells were drilled by the Ohio Fuel Gas Co. being No. 1 on the W. L. Ford farm, Section 21, and reported at 11,000,000 feet, while No. 1 on the J. N. Mehaffey farm, same section, was reported at 10,000,000 feet. There is a large amount of new development work going on in this county by the leading gas companies. In Wheeling Township, the Logan Gas Co. made locations for tests on the William T. Booth 170 acres, as well as No. 1 on the A. R. Booth 106 acres, both in Section 8. The Ohio Fuel Gas Co., Empire Gas & Fuel Co., Cambridge Gas Co., Big Lime Oil Co., Detroit Edison Co., Ohio Oil Co., Keith and others and numerous other concerns are doing test work in Adams, Wheeling, Cambridge and Westland Townships.

In Sullivan Township, Ashland County, the Logan Gas Co. brought in a good gas well at a test in the northwest corner of the Lee Burkhart 102 acres, Lot 80. An average gas well was drilled by the Ohio Fuel Gas Co. in a test in the southwest corner of the Delphia J. Hitchcock 53 acres, Section 17, Brunswick Township, Medina County. Same company drilled a test in the northeast corner of the Robert Squire 85 acres, in the southwest quarter of Lot 14, Columbia Township, Lorain County and got a dry hole at a total depth of 2,920 feet. In Congress Township, Wayne County, the Arco Oil Co.'s test in the northeast corner of the Eliza A. Ginter 74 acres, Section 36, is also an average gas well for that field.

The Logan Gas Co. drilled in a dry hole at a test in the northwest corner of the Isaac Bail 44 acres, Section 32, Carthage Township, Athens County, in the Big Injun formation. In Knox Township, Vinton County, an average gas well was drilled by Cameron and others on the Cameron S. Clark farm, Section 5, while the Stanley Oil Co.'s No. 1 in the southeast corner of the John W. Stanley 80 acres, Section 3, is reported at 5 bbls.

New Work Under Way

In Jefferson Township, Knox County, the Ohio Fuel Gas Co. has started drilling a test in the northeast corner of the J. M. Miller 75 acres, Section 23, and the Upham Gas Co. made a location for a test in the northwest corner of the Joseph Colopy heirs 40 acres, Section 18.

In Orange Township, Ashland County, the Logan Gas Co. abandoned its location made for a test on the Elizabeth Biddinger 129 acres, Section 5, and started drilling its second test 1,200 feet south of No. 1 and 500 feet from the west line of the William H. Brandt 252 acres, Section 2. In Hanover Township, the Ohio Fuel Gas Co. is drilling a second test in the northwest corner of the M. C. Leathrow 20 acres, Section 27. In Green Township, the Logan Gas Co. is drilling its test in the northwest corner of the Wiley Johnson 40 acres, Section 20, and the Wiser Oil Co. is starting a test on the W. G. Jenkins farm, located 60 feet north of the railroad and 1,000 feet from the east line of the farm.

In Congress Township, Wayne County, the Logan Gas Co. is drilling No. 4 well, 1,950 feet from the north line and 250 feet from the west line of the O. E. Frank 160 acres, Section 36.

In Monroe Township, Holmes County, the Ohio Oil Co. staked a location for No. 3 in the northeast corner of the Olive M. Smithisler 37 acres, Lot 7. In Hardy Township, the Pure Oil Co. is drilling No. 4 in the southeast corner of the Warren R. Close 84 acres, Lot 9. In Prairie Township, same county, the same company is drilling No. 2 in the northeast corner of the Isaac F. Snyder 55 acres, Section 18: No. 2 in the southeast corner of the Margaret Miller 122 acres, same section, and set a stake for No. 3 on the same farm. In Paint Township, the Logan Gas Co. made a location for a test in the southwest corner of the Emanuel B. Weaver 130 acres, Section 33. In Kilbuck Township, the East Ohio Gas Co. set a stake for a test in the northwest corner of the Alfred and Ella Mohr 30 acres, Lot 19.

C. A. Cody and others have started a test 321 feet from the south line and 843 feet from the west line of the Hannah McCall Davis 26 acres, in fractional Section 36, Carthage Township, Athens County.

In the Cleveland Field, in Dover Township, Cuyahoga County, the Logan Gas Co. made a location for a test in the southeast corner of the G. Dunford 50 acres, Lot 16 and for No. 1 in the northeast corner of the A. Dunford 12 acres, Lot 15.

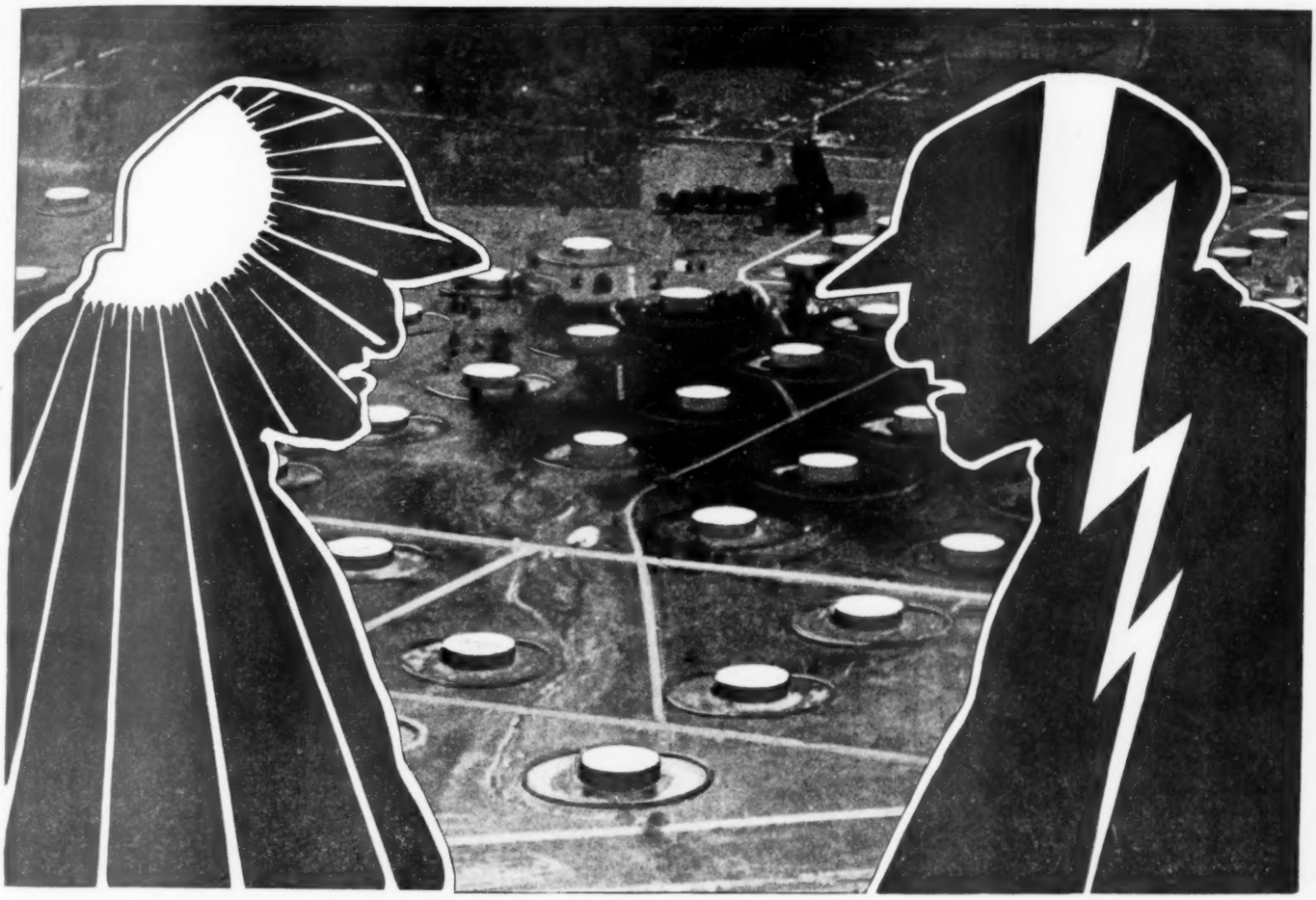
In Knox Township, Vinton County, Beagley & Shaffer are drilling a second test on the William Dearth farm, Section 7 and the Gordon Oil Co. is drilling No. 2 on the Wesley Washburn farm, same section.

Frank Selby is drilling a second test in the northwest corner of the Lorenzo Lovell 160 acres, in the southwest quarter of Section 24, Berne Township, Athens County. Clark and others are drilling a second well in the southwest corner of the E. R. Lash farm, in the northeast quarter of Section 15, same township.

Indiana

Only two completions are reported from Indiana during the week and both are wildcats in the southwestern part of the State. One is the test of Otter Geiger and others, 600 feet from the south and east lines of the J. W. Backus farm, in the northwest quarter of Section 10, Washington Township, Daviess County, about 3 miles directly south of Washington, the county seat, and approximately 2 miles east of the productive pool recently opened by the Geiger Oil Co. and the Peek Oil Co. in Section 21, Veale Town-

(Continued on Page 114)



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Oil Industry Department

MEN KNOWN IN OILDOM

George W. Campbell

George W. Campbell, assistant chief of the engineering division, Oil and Gas Section, Income Tax Unit, is widely known to the oil industry. He was born June 9, 1880 at Rixford, McKean County, Pennsylvania, where his father, George W. Campbell was an operator of lumber mills at Kane, Ludlow and Kinzua, Penn. He grew up under surroundings calculated to familiarize him with the oil industry, in which his taxation work figures so prominently.

Mr. Campbell attended school at Kane, Pa., and was valedictorian of the class of 1899 at the high school there. At the outbreak of the Spanish-American war he volunteered as a private in the 16th regiment, Pennsylvania volunteers of infantry and served in the Porto Rican campaign.

Mr. Campbell entered Allegheny College in 1899 in the class of civil engineering, but on the death of his father two years later, he left college to assist in the management of large lumber operations at Kinzua, Pa. On the successful completion of this work he went with his brothers, John W. and Edward W. Campbell to West Virginia, where during eight years 175,000,000 feet of lumber was manufactured.

While ostensibly a lumberman and timber cruiser, Mr. Campbell allowed no opportunity to get into the oil game escape him. His first well was drilled jointly with his brother, Edward, in 1903 near Andover, N. Y.

In 1920 Mr. Campbell followed the oil boom to Weaton, Ky. where with many others he obtained some of the best leases in the country and proceeded to prove that oil was "migratory and fugacious" by drilling perfectly good holes just after the oil had migrated. In 1923, Mr. Campbell was employed in the engineering division as Valuation Engineer, and in August, 1925, was appointed Chief of the Oil and Gas Section, Engineering Division, Income Tax Unit, which is one of the most important sections of the Bureau of Internal Revenue, Treasury Department.

PERSONAL PARAGRAPHS

A. A. Moody, vice-president of the Jarecki Supply Company, has completed a tour of the Mid-Continent fields.

* * *

W. G. Skelly, president of the Skelly Oil Company, has been visiting in Michigan with his family.

* * *

Edward C. Sicardi has retired as president of the Union Tank Car Company. No successor has yet been appointed.

R. A. Griffith, president of the Sinclair Oil & Gas Company has returned from a vacation spent in the northern climes.

* * *

Talbot C. Wildman, president of the Wildman Petroleum Company of Forth Worth, Texas, was a Tulsa visitor last week.

* * *

Ted Galey of the Gypsy Oil Company land department, is back at his desk in Tulsa after a vacation spent in Carthage, Mo.

* * *

H. R. Hahn, scout for the Ohio Fuel Oil Company in west Texas, stationed at Midland and San Angelo, was a recent Fort Worth visitor.

* * *

Virgil Whitworth, geologist with the Simms Oil Company of Dallas, is now in the North Central Texas district with headquarters at Cisco.

* * *

James N. Dunlavey of the Unity Petroleum Company forces at El Dorado, Ark., has returned from a vacation spent with his family at Olean, N. Y.

* * *

Chief Engineer H. H. Hill of the Bureau of Mines, was in Casper, Wyo., for several days while on an inspection trip from headquarters in Washington.

* * *

E. H. Steiger, president of the New York Oil Company and Harry Hynds, director of that company, have been on a tour of the Wyoming oil fields.

* * *

William T. Rapp, independent oil producer of Okmulgee, Okla., is home from an inspection trip through the North Texas fields, and the Texas Panhandle.

* * *

Max Fuhrman, president of the Fuhrman Petroleum Company of Okmulgee, Okla., is back in the United States after a summer spent in touring Europe.

* * *

D. W. Lewis of Midwest, Wyo., superintendent of production for the Midwest Refining Company at Salt Creek, and Mrs. Lewis, are on a trip to the Pacific Coast.

* * *

A. G. Reed and R. C. Williamson of Fort Worth, Tex., representing the Cosden interests, accompanied by C. H. Weedman, of Faith, S. Dak., were in Casper, Wyo., recently.

* * *

K. B. Nowels and C. E. Reistle, connected with the Bureau of Mines reasearch laboratory at Laramie, Wyo., spent several days in Casper and the Salt Creek oil field recently.

* * *

Arthur Smothers of the Standard Oil Company of California's pipeline department has just returned to the Los Angeles office following a very pleasant trip to Yosemite Valley.

* * *

E. C. Bowers, formerly vice-president, has been elected president of Wickwire Spencer Steel Company, succeeding D. F. Edwards. Paul M. Macklin succeeds Mr. Bowers as vice president.

* * *

John Perryman, R. D. Walker and E. W. Krampert, officials of the Prairie Oil & Gas Company of Wyoming, spent two weeks traveling through Montana and inspecting the fields in that State.

* * *

H. V. Foster of Bartlesville, Okla., who has been chief executive of the Indian Territory Illuminating Oil Company since 1904, is visiting in southern California and incidently making a tour of the various oil fields.

* * *

H. D. McCracken, vice president of the United Producers Pipe Line Company, Transcontinental Oil Company subsidiary, has returned to Fort Worth, Tex., from a vacation in Los Angeles and Santa Barbara, Calif.

* * *

Former Governor Albert E. Sleeper of Bad Axe, Mich., State Treasurer Frank D McKay of Grand Rapids, Mich., Samuel Odell of Shelby, Mich., former state treasurer of Michigan and now a member of the State Public Utilities Commission; A. B. Cook of Owosso, master of the State Grange, and George F. English of Bad Axe, former state oil inspector of Michigan, spent some time looking over the Saginaw, Mich., oil prospects.

D. B. Geiger, representing the Pure Oil Company of Columbus, Ohio, is scouting the new Saginaw, (Mich.) Oil Field for his company and will decide whether his company will do some development work there or not within a few days.

* * *

Vern T. Whitney, manager of Ohio bulk distribution, John Edwards, general sales manager and C. J. Larue, secretary and treasurer of the Paragon Refining Company, of Toledo, Ohio, have returned from a trip to Cincinnati and western Ohio points.

* * *

Doc. DeBoard, formerly of the Pure Oil Company, with headquarters at Charleston, W. Va., and L. E. Huffine, formerly of the Indian Refining Company, have entered the employe of the Paragon Refining Company, in the capacity of salesmen in the Ohio bulk territory.

* * *

W. W. Donnelly, president of the Federal Supply Company of Texas, with Fort Worth headquarters, has been in Marietta, Ohio, for a couple of weeks at the bedside of his father, who was critically ill. Improvement in his father's health, however, has allowed him to return to Fort Worth.

* * *

A. S. McClintock, veteran Kentucky operator and father of the Cumberland County oil fields of that State, stopped off for a short visit with his many Toledo, Ohio, friends, while en route to his home at Cleveland, Ohio, from a several weeks' stay at Grand Lake, Mich.

* * *

W. W. Hagebush, of Oklahoma City, Okla., attorney and royalty buyer for the Ohio Fuel Oil Corporation, subsidiary of the Columbia Gas & Electric Corporation, recently returned to his office from a trip to the San Antonio district of Texas, where he inspected the Randado and other fields in that region.

* * *

G. F. Aldrich, formerly with the Skelly Oil Company in west Texas, has joined the staff of the Independent Oil & Gas Company, and is stationed at Midland. "Zud" is a graduate of the University of Missouri school of geology and is one of the coming young geologists in this part of the Mid-Continent, although his work at present is largely scouting.

* * *

J. A. Bownocker, state geologist of Ohio, recently inspected the shale oil sections of Utah, Colorado and Wyoming, visiting the government plants at Rifle in Colorado, the Catlin plant in Nevada and shale oil prospects at Green River, Wyo. There are said to be some valuable shale oil deposits in Ohio.

* * *

Walter C. Teagle, president of the Standard Oil Company of New Jersey, together with H. S. Boone and Orville Harden of the same company, were in Los Angeles recently following a trip through the San Joaquin Valley fields. Mr. Teagle and his associates have been looking over the situation in the Texas fields before returning to New York.

* * *

Charles Holland, son of William Holland, field superintendent of the Ohio Oil Company for the Rocky Mountain region, was seriously injured when a truck he was driving, turned over near Kaycee, north of Salt Creek. He was taken to the hospital at Kaycee and after a few days was able to make the trip to Casper and is now well on the road to recovery.

* * *

C. E. Stalker, president of the Stalker Oil Company, with headquarters at Cisco, Tex., is making a pleasure trip out of a journey to New York in the interest of his company. He stopped over in Fort Worth, Tex., for a few days and then went to New Orleans, La., where he boarded a ship for Gotham. He will return by rail, stopping off at Philadelphia, Pa., long enough to take in the Sesquicentennial celebration and primarily the Dempsey-Tunney fracas.

* * *

Levi Smith, president of the Big Lake Oil Company, has returned to the headquarters of the company at Texon, Tex., from a three months' vacation in California. After a brief visit at home he left for Houston and Fort Worth, Tex., on his way to Pittsburgh, Pa., where he will confer with other officers of the Big Lake Oil Company and its holding company, the Plymouth Oil Company.

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The Latest AJAX Improvements

Have you seen the new *Enclosed Crankcase* Ajax engine? Its improved operation is already saving money for oil producers.

This new product of the famous Ajax factory is the first single cylinder, steam drilling engine to have complete splash lubrication; crosshead, crank pin and main bearings work in a bath of oil.

The crankshaft is *counter balanced.* The new Ajax gives you *more power, smoother operation,* less vibration and strain on holding down bolts and other equipment—in a word, better *results.*

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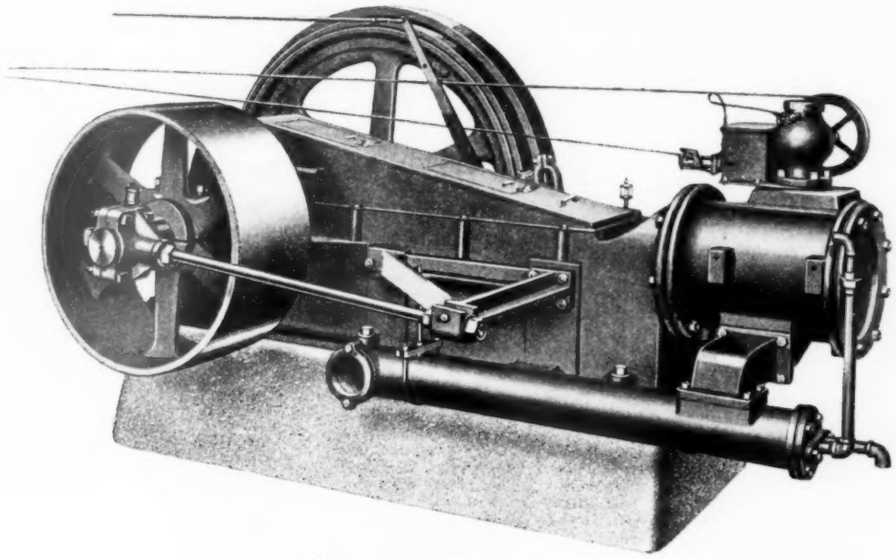
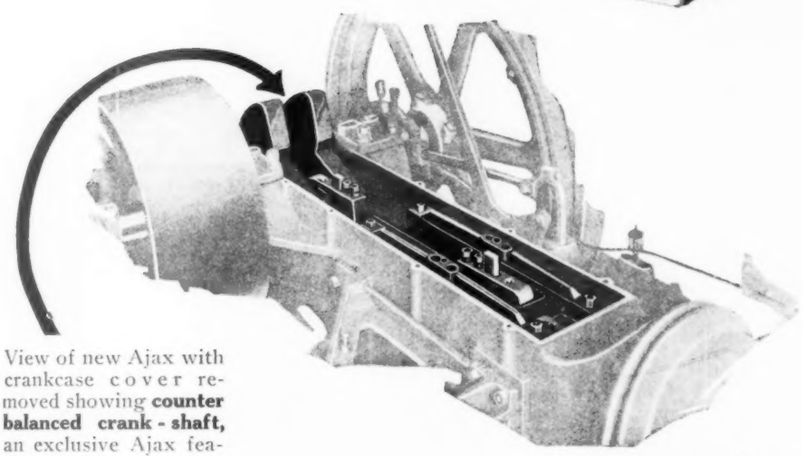
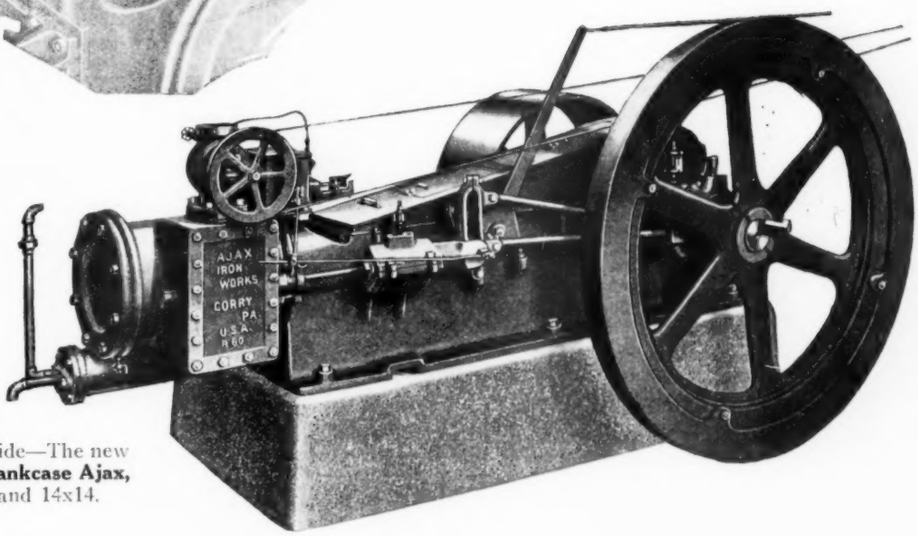


Pulley Side — The new **Enclosed Crankcase Ajax.** Note convenient hand-hole in crank-case cover.



View of new Ajax with crankcase cover removed showing **counter balanced crank - shaft,** an exclusive Ajax feature.



Fly Wheel Side—The new **Enclosed Crankcase Ajax,** sizes 13x14 and 14x14.

STEAM ENGINES

Natural Gas Developments

ALBERTA GAS SUPPLY AWAITS DEVELOPMENT

CHATHAM, Ont., Sept. 11.—In an address recently to the Edmonton, Alta., board of trade, C. J. Yorath, president of Northwestern Utilities, Ltd., of Edmonton, stated that if it were possible to deliver gas to every urban district in Alberta, there would still be 20,000,000 feet of gas a day going to waste in the Turner Valley alone.

Recent investigation, he stated, had resulted in startling discoveries, and had revealed the promise of large producing fields in directions where previously they had been unsuspected. The oil industry of Alberta had so far scarcely been touched, and he anticipated enormous developments in the near future.

The Canadian Western Natural Gas, Light, Heat & Power Co. of Calgary, has made formal application to the Alberta Public Utilities Commission for new rates covering the cities of Calgary and Lethbridge and the towns of Macleod, Granum, Claresholm, Nanton and Okotoks; the new rates to take effect on the expiration of the present rate agreement on September 30.

The new rates, per 1,000 feet, are on a sliding scale based on consumption, as follows: First 50,000 feet, 58c; next 50,000, 53c; next 100,000, 48c; next 100,000, 45c; next 1000,000, 40c; next 300,000, 35c; next 300,000, 30c; next 1,000,000, 25c; next 2,000,000, 22c; next 4,000,000, 20c. These rates are gross, and subject to a prompt payment discount of 5c per 1,000 feet. The old rates were: First 200,000 feet, 48c; next 250,000, 45c; next 550,000, 40c; over 1,000,000, 35c, all subject to the 5c discount.

With the old rates provision was made for a minimum charge of $1 a month, and under the new schedule a $1 a month service charge is asked. The old rates were fixed in 1921 for a three-year term; and were in 1924 renewed for a further two years.

The company originally supplied gas from the Bow Island field, to which was later added some production secured in the Barnwell field. In recent years the supply has been supplemented by the new production secured by the company itself in the Foremost field; and by residual gas purchased from the Royalite Oil Co. in the Turner Valley field. The company claims that the 1921 rate was based on a rate base of $7,123,587.20 and allowed for an estimated revenue $815,339.38 greater than has actually been received. Figures have been submitted to the Public Utilities Commission to show that, in view of this shortage and the various outlays undertaken since then, a fair rate base at present would be $9,081,236.43, and it is upon this that the proposed new rates are based. The new schedule is upon the further understanding that the present large gas supply from the Turner Valley field continues to be available.

The company's application shows that in the last five years the following sums have been spent: on development of fields and wells, $277,863.49; on transmission lines, $540,191.80; on distributing system, $319,064.82; on telephone line and automobiles, $16,127.03 and on the cost of issue of preference shares, $86,732.10; a total of $1,239,979.24.

The application will be opposed before the Alberta Public Utilities Commission by the various municipalities affected.

MAHONEY DOME LINE

The pipeline to be laid by the Prairie Oil & Gas Co. of Wyoming for the transportation of natural gas from the Mahoney Dome Field in Carbon County to the Producers & Refiners' refinery at Parco, Wyo., will be about 31 miles long and will consist of 8-inch and 10-inch pipe. The Prairie has five gas wells at Mahoney Dome with no market. Producers & Refiners has a 90-mile pipeline from the fields in Carbon County through which it transports about 30,000,000 feet daily to the refineries at Casper. There seems to be an almost inexhaustible supply of natural gas in the Little Lost Soldier district.

FOUR MILLION GASSER IN KINGMAN COUNTY

WICHITA, Kans., Sept. 11.—By far the best showing had in the top of the Fleeger chat of any of the wildcats drilling in the Kingman-Reno area since the discovery in 16-27-7, was found by the Cassoday Oil Corp. at No. 1 Yeoman in the center of the southeast of 35-28-7, 9 miles south of the discovery.

From less than two feet of chat topped at 4,032 feet, a gas flow estimated from 3,000,000 to 4,000,000 feet was had and the test shut down to wait for orders from H. H. Patten, president of the company, who is in California.

Pipe is set in this hole at 4,028 feet, leaving it in good condition for deeper drilling without further underreaming. Several days ago this test reached the contract depth of 4,000 feet, where, under ordinary circumstances, it would have been abandoned, but on account of the owners' desire of seeing a test of the Fleeger chat, it was drilled ahead.

This operation is 4 miles south of the Fleeger-Houston Oil & Gas Co.'s No. 1 Greenleaf in the northeast corner of 13-28-7, which is drilling at 3,670 feet. The Greenleaf had a heavy flow of gas higher up the hole and, it, too, is regarded as a likely test.

In eastern Kingman County the test of Winters and Harwood at No. 1 Lindholm in the center of the northeast of 22-28-5, which topped the variegated shales above the Fleeger chat at 3,680 feet, was finishing an underreaming job to 3,753 feet and expected to drill ahead with the Fleeger chat expected with each screw.

CARBON GAS QUOTA IN MONROE REDUCED

Dr. V. K. Irion, head of the Louisiana Conservation Department, has reduced maximum consumption for the purpose in the Monroe Field by 31,000,000 feet per day.

The order was effective September 1 and is in line with the department's policy to reduce the maximum consumption of gas for carbon making in the Monroe Field 31,000,000 feet per day at six months intervals. The present order reduced maximum consumption from 275,000,000 feet to 244,000,000 feet per day, and March 1, 1927, another similar reduction will cut it to 211,000,000 feet per day.

At this rate the plants will be squeezed out of business September 1, 1930, or March 1, 1930, or before, as some of them are already looking for new fields. The program was the result of a conference in New Orleans a year or more ago when there was a movement for legislation to drive them out of the state at a forthcoming session of the legislature.

Every time maximum consumption of gas has been reduced under the conservation department's policy the price of carbon black has been advanced. In 1920-21 carbon black was 4 cents per pound; under the reduction of gas consumption of March 1, 1926, it was 8 cents and last July it was expected to go to 10 cents when the September 1 revision became effective.

HALF MILLION FUND FOR RESEARCH IN GAS

An appropriation of $500,000 to be used exclusively in research work, the results of which are expected to usher in a new era for the use of gas in industry, and promise a wonderful expansion for the gas industry itself, has been made by the American Gas Association.

This sum is to be collected and expended over a period of five years, said Alexander Forward, its secretary-treasurer. The major portion of the money has been turned over to the Surface Combustion Co., New York, a Henry L. Doherty & Co. subsidiary, to be used in the furtherance of the pioneer work which this organization is already conducting.

While recent progress in the gas industry has been amazing, with each new development in combustion practice has come the realization of unlimited possibilities for new uses of gas and endless applications in industries generally.

Gas companies have labored under the handicap of insufficient equipment of correct design and high efficiency for the economic utilization of this fuel in industry because there were no large organizations capable of developing and manufacturing the necessary apparatus. Attempts to convert furnaces designed for other fuels to gas have failed to develop the inherent advantages of a fuel which lends itself perfectly to the most exacting heating requirements. Pioneers, like Henry L. Doherty, have seen the needs and possibilities of the gas industry and have initiated the first program backed up by manufacturing facilities over a period of years. The greater progress that can be made by a concerted program of research has been appreciated by the gas companies for some time. In putting this plan into effect through the American Gas Association and the Surface Combustion Co., the gas industry is following a plan which other industrial associations have found most effective.

"In the last analysis the position of gas is supreme in the heating field," said Major Forward. "The repetition of coal strikes, the outlawing of smoke, the demand of the modern housewife for the essential labor saving services of utility companies, the advent of insulated homes and the growing necessity on the part of fuel users for an absolutely dependable fuel service—these are a few of the developments that make conservative leaders believe that gas, as the future fuel of the nation, is only in its infancy."

GAS RESEARCH FELLOWSHIP

LOS ANGELES, Calif., Sept. 11.—A research fellowship at the University of California for the furtherance of studies pertaining to the gas industry will be established by the Pacific Coast Gas Association as a result of a five-day session just concluded in Pasadena. For the maintenance of the fellowship the association voted to give $1,000 a year for three years with the probability that the endowment will become permanent. Funds were recently given by the association to establish a research laboratory at the university. The thirty-fourth annual convention of the association will be held in San Francisco next year.

MONTANA GASSER

Minnesota Northern Power Co.'s new gasser, drilled to supply the town of Glendive, Mont., has a reported flow of 5,000,000 feet per day from a depth of 800 feet. This well is on Cabin Creek Field, 25 miles north of Baker. Minnesota Northern is a Minneapolis corporation that is reported planning to build a gas line to Miles City, Mont.

HELIUM WELL SEALED

SALT LAKE CITY, Utah, Sept. 11.—The Federal Government has taken over the Utah Oil Refining Co.'s test well on the Woodside Dome, Emory County, Utah, to conserve the helium gas encountered at 3,120 to 3,165 feet. The company turned the gas over to the Bureau of Mines for analysis and offered the well to the Government, no oil having been found. This action led to the creation of helium reserves for the military aviation service. The well is now being sealed by engineers of the company and the Government.

TO PIPE MIRANDO GAS TO LOWER RIO GRANDE

SAN ANTONIO, Tex., Sept. 11.—Mexican Seaboard interests are to start construction of a 160-mile 12-inch gas pipeline from the Mirando district in Webb County to Brownsville at the lower end of the Lower Rio Grande Valley. The supply of gas is understood to have been contracted from the Kitselman & St. Albans interests in the upper part of Jim Hogg County, where a field of good size has been developed and proven up with a considerable number of completed wells that are shut in and waiting the pipeline.

Preliminary work toward the laying of the line was started more than a year ago when Bertrand de Graffe and Albert T. Woods secured franchises in 14 cities in the Lower Rio Grande Valley and secured industrial contracts for approximately 6,000,000 feet of gas a day. The line will supply a country described as the "Winter Garden of the World," where there are numerous irrigation projects lifting water by pump from the Rio Grande River and a large amount of gas will go to supply fuel to these projects. It is estimated the initial consumption of gas will be about 15,000,000 feet and the project will cost about $4,500,000.

P. M. Longin, president of the Mexican Seaboard, made a personal inspection of the project in company with A. L. Ballard, geologist, of Ballard & Underwood of San Antonio.

This will be the fourth gas line to take gas from the Laredo district to outside territory. The city of Laredo is being supplied from gas in the field near it which would be a fifth. The four projects to take gas to distant cities include the Southern Gas Co. of San Antonio, which built and completed the first line, 85 miles long from the Carolina-Texas and Cole fields in Webb and Duval Counties to a connection with its line in McMullen County, running to San Antonio, the total length of its line to San Antonio from Mirando being 153 miles.

Houston Pipe Line Co., a subsidiary of the Houston Oil Co., is building at this time a line from the same fields to Live Oak County, where it will connect with the line already in operation from the gas field on the Cartwright land to Houston.

Houston Gulf Gas Co. has a line projected from its gas leases contracted for in the Mirando district to a connection with its line which is already in operation from Refugio County to Houston.

TEXAS TOWNS GET GAS

WELLINGTON, Tex., Sept. 11.—Gas to supply the cities of Wellington, Childress and Quanah will be turned into the mains about September 15, according to advices from the Northern Texas Utilities. The line which runs from the Wheeler Field to Quanah through Wellington and Childress is completed with the exception of the river crossing on Buck Creek, which is expected to be completed within the next few days.

NO MYSTERY BUT MORE PERFORMANCE

DRILLING TOOLS
DESIGNED RIGHT
WILL DRILL MORE

and BETTER

LEIDECKER
SPIRAL BITS
Patented
Other Patents Pending

FASTER—

It is just natural that four cutting points and two chopping edges acting under both vertical and rotary motion will cut more and mix the cuttings better than any tool with half that number acting in a vertical direction only.

EASIER—

Spiral Bits do not load-up. They mix the cuttings and prepare the well side wall. Operation is minus the diving and sticking, therefore less grief to the wire line.

STRAIGHTER—

Full round contact with the well side wall, therefore full-round hole that the pipe follows readily. Straight hole.

and BETTER—

Drilling a straight, round hole that the pipe follows without underreaming is advantage enough in itself, but consider the maintenance of a pumping well. Worn rods and tubing, breaks, power losses through friction, shutdowns and various other evils result from operating in crooked holes.

Thousands of gas wells have been prematurely abandoned on account of water breaking through wire cut pipe. Spiral Bits are the means to better drilled wells.

They are carried in stock by up-to-date Supply Houses.

Manufactured exclusively by

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SPIRAL DRILLING TOOL CO., 329 East Fourth St., TULSA, Okla. Phone 3-1050.

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LEIDECKER

EQUIPMENT AND SUPPLIES

NEW TURBO-GENERATOR FOR RIG LIGHTING

The Pyle-National Co. of Chicago, represented by C. T. Tewksbury of Tulsa, has just announced a new and larger steam turbo-generator for rig lighting service. This machine, the Type "M-2," has a capacity of 2½ kw. and is the result of extensive development and experimental work carried on by the Pyle-National Co.'s engineering staff over the past two years.

The Type "M-2" turbo-generator has a number of new features particularly adapted to oil field service. In general it is described as an extremely rugged, compact unit, fully enclosed and designed to stand the most severe service conditions. The larger capacity meets the present demand for more light and enables the use of 25 to 40 or more incandescent lamps in a string, depending upon size, or the installation of two or three large floodlights in addition to a number of small lamps. The growing use of floodlight projectors for rig lighting makes the Type "M-2" especially useful, as it has ample capacity for carrying the load of the larger projector lamps.

The generator end of the Type "M-2" is a four-pole machine with a wave wound armature, giving, it is said, the new machine unusual reliability. The entire generator is liberally designed throughout, with large commutator, etc. Four brushes are used, any one of which can be lifted without disturbing the operation.

One of the most valuable characteristics of the Type "M-2" is the wide range of steam pressures under which it may be operated. This new machine will, it is said, carry "its full rated load of 2,500 watts on any steam pressure from the full pressure of 200 pounds down to as low as 80 pounds while maintaining its rated voltage within three volts of normal, with no change in adjustment of governor or valve. It is fully capable of carrying a good-sized overload without damage to the machine."

B. & A. SPECIALTY CO. TO HANDLE ACME TOOLS

The Acme Fishing Tool Co. announces that the B. & A. Specialty Co., 404 West First St., Tulsa, Okla., has been appointed sales agent of Acme tools for Oklahoma.

The B. & A. Specialty Co. has enjoyed remarkable growth, from a modest beginning a few years ago as a selling and servicing organization.

Elsewhere in this issue the Acme's announcement of this new connection states, "The success of the B. & A. Specialty Co. is largely attributable to its policy, consistently followed, of handling only the very highest grade oil field products, and backing that policy constantly with really constructive service."

P. V. McGivern, who has been at the helm of the B. & A. business since it started, is well known among Oklahoma purchasing men, having been in close contact with them for 15 years.

DRILLING UNIT BRANCH

R. H. Shields, western distributor for Buffalo Gasolene Motor Co., manufacturers of the Buffalo drilling unit, has opened a branch office at McCamey, Tex., where the Buffalo drilling unit will be kept on display and service facilities offered to users in that territory. This is the third branch office that Mr. Shields has opened within the last few months. The other two are at Best, Tex., and at Midland, Tex. His head office is at Eldorado, Kans.

OIL COUNTRY DEMAND CONTINUES, UPSETTING DELIVERY PROMISES

By B. E. V. Luty

PITTSBURGH, Pa., Sept. 13.—A feature of the trade in oil country tubular goods is that many delivery promises by mills are not being kept. In July and early August some promises of shipment in three to four weeks were made and such deliveries were not accomplished. Possibly in some cases mills made a little better promises than they should, as a matter of competition, while in other cases they apparently counted on a decrease in buying by this time that would shorten their deliveries. No such shortening has occurred. Deliveries are as much deferred at the present time as hitherto.

On 2-inch tubing and some other small lap weld sizes the best delivery promise now is the latter part of October, which of course would in practice mean the end of October. In general lap weld sizes are four to six weeks in arrears.

Business in oil country goods has held out longer than was commonly expected, for usually there is a tapering off long before this time in the year. As matters stand the mills are not engaged in catching up at all, and it is merely a prediction that prompter deliveries will be obtainable in future.

New Pipe Contracts

A contract similar to one made a year ago has recently been concluded for 300 miles of 10-inch pipe for a line in Colombia, South America. This is between the United States Steel Products Co. and the National Andian Corp. The Products company is a subsidiary of the United States Steel Corp., the order to be filled by the National Tube Co., while the National Andian Corp. is a subsidiary of the International Petroleum Co., a Canadian subsidiary of the Standard Oil Co. of New Jersey.

The 450-mile 20-inch gas line from the Amarillo Field, Texas, to Kansas City is still in sight, with no precise information as to when the business will actually be distributed. The Mexican Seaboard Oil Co. is understood to be inquiring for 160 miles of 12¾-inch pipe for a gas line from Webb County, Texas, through the Rio Grande valley to Brownsville.

Early deliveries on line pipe cannot be arranged, on account of the pressure for large size casing and for the remaining deliveries on old line pipe orders, and it looks as if heavy winter deliveries would have to be taken.

While buying of merchant pipe has slackened off somewhat in the past 30 days the decrease is small and in general the buying seems to be approximately equal to the production. Mills do not seem to have much stock. They may have been replenishing to an extent lately, but at any rate they have not got their stocks above normal.

Operations at pipe mills are continued in full at the very high rate of the past few months and there are no signs as to when operations will decrease, even though in the past there has invariably been a decrease towards the end of the year.

Steel Buying Heavier

Steel buying in general has been heavier in the past three or four weeks than was expected, and estimates now are that production of steel in August was considerably above that of July, instead of just a little above, as was forecast about the middle of the month. From present indications September will equal the August production.

The sheet mills seem to be succeeding in their program to change the base gauge in black and galvanized from 28 to 24-gauge, at the same time rearranging the gauge differentials. Base prices of 3.15 cents on black and 4.30 cents on galvanized, 28-gauge, are replaced by base prices of 3.00 cents on black and 3.85 cents on galvanized, 24 gauge. The differentials are such that the lighter gauges bring a little more than formerly and the heavy gauges a little less, which the mills assert makes prices in correct relation to cost of production. Automobile sheets have been advanced from 4.20 cents to 4.30 cents, apparently without any difficulty.

Standard billets continue very firm at $35, making ordinary forging billets $40 by the usual differential.

OIL FIELD WORK IS SEVERE TRUCK TEST

Recent delivery of several Pierce-Arrow dual-valve two-ton trucks to the Pure Oil Co. for production work in the oil fields, brings to light an interesting story of the severe conditions under which trucks in the oil fields work, where mud sometimes is so deep that draft animals frequently wallow knee deep in it.

These trucks are equipped with multiple speed winches and pneumatic tires. Winches are necessary because most of the equipment necessary for a well is of the heaviest nature, for instance, steam boilers are often hauled 50 miles to the well from the nearest railroad point. Pneumatic tires are used because solid tires do not furnish sufficient traction over the fields where the trucks must go.

NEW OFFICIALS NAMED

The Ross Heater & Manufacturing Co., Inc., of Buffalo, announces that Harold M. Graham has joined its organization as chief engineer. Mr. Graham is very well known in the industry, having had a very broad and comprehensive experience in thermodynamical engineering, both in the development and designing of equipment. The company also announces Ross H. Rathbun has joined its organization as sales manager. Mr. Rathbun leaves the Westinghouse Electric & Manufacturing Co., with whom he has been associated since 1916.

OPENS TULSA OFFICES

The Garlock Packing Co. of Palmyra, N. Y., has opened offices at 206 East Third St., Tulsa, Okla. The Tulsa office will be in charge of J. M. Foley and G. C. Wieda, who will be under the supervision of F. E. Erlandson, district manager of the company in the St. Louis district.

TRADE LITERATURE RECEIVED

Hall-Will, Inc., of Erie, Pa., has distributed a catalog and price list fully describing the Red E Hall portable electric pipe threading machine. Copies will be mailed upon application to the company.

P. & H. Valve Co. of Oklahoma City, Okla., has sent out folders on the P. & H. valve for oil and water wells. It is described as a valve without a ball.

COOK PAINT & VARNISH BUYS HOUSTON FACTORY

The Cook Paint & Varnish Co. of Kansas City has contracted for the purchase of the property formerly owned by the American Cotton Oil Co. in Houston, Tex. This consists of a five-acre tract of land served by two railroads and improved by a three-story and basement brick building 100 feet by 100 feet and oil tank storage totaling 350,000 gallons.

This property is within 2 miles of the business district of Houston, and is most conveniently situated to be served by all railway terminals and the ship channel.

The Cook Paint & Varnish Co. has been looking forward to the establishment of a plant on the Gulf Coast and chose Houston for its location because of its security as an industrial center, its exceptional transportation facilities, both rail and water, and its extensive tributary territory which is undergoing such rapid development. The new property will be immediately remodeled and equipped to manufacture the complete line of paints, enamels and varnishes. The installation will include the most modern paint manufacturing machinery and varnish stacks.

The management and personnel of the new division has not yet been announced, but they have stated that an aggressive sales organization would be built up to serve the industrial, painter and dealer trade of the Houston territory.

NEW DEVICES SHOWN AT COAST EXPOSITION

Among the interesting devices exhibited at the Industrial and Trade Exposition in Los Angeles recently by the Volz Engineering Equipment Co. was a patented combination gas and oil burner or carburetor and a new automatic feed water control. In an issue last month was described the Volz No. 1 automatic feed water control and water column unit; its No. 2, while engineered along the same lines, is made for attachment to boiler plants already fitted with a water column.

Naturally it is simpler in construction and less expensive than No. 1 which is recommended for installation on new boiler plants. The Volz No. 2 automatic feed water control, the company announces, is extremely well designed. It is made of brass throughout and is an exceptionally clean-looking instrument which is installed vertically instead of horizontally, and, it is said, holds the difference between high and low water levels to one-half inch or less.

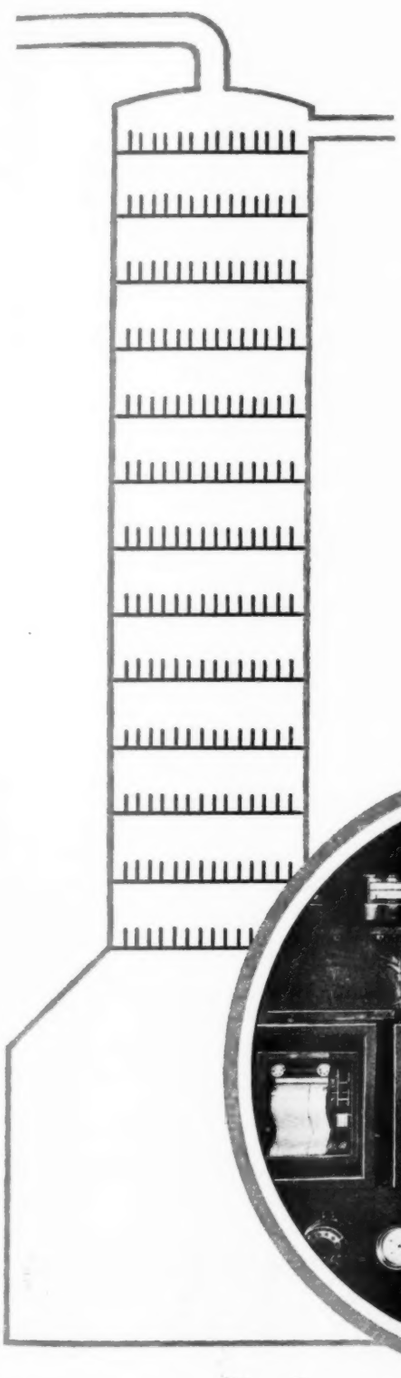
NEW TWO-TON TRUCK BY GRAHAM BROTHERS

The latest additions to the line of commercial cars and trucks being sold by Dodge Brothers dealers are two new types of two-ton capacity. Like their smaller predecessors the new chassis will be supplied with a variety of bodies suited to practically every requirement. Two lengths only are made: the shorter, for 9-foot bodies, has a wheelbase of 137 inches and the longer, which is for 12-foot bodies, has a wheelbase of 162 inches. Both chassis are equipped with pneumatic tires, with either single or dual rears optional. Where single tires are used 32x6-inch size are fitted in front and 34x7-inch at the rear. For dual rear tire equipment disc wheels are standard with 34x5-inch tires both front and rear.

This new and larger truck embodies the constructional features found in Graham Brothers one-ton and ton-and-a-half trucks.

Bubble Towers and Brown Automatic Control

—*the tendency of fractionating practice today*



The aim of the refiner today is to convert a maximum portion of overhead vapors into finished stock *in a single operation.*

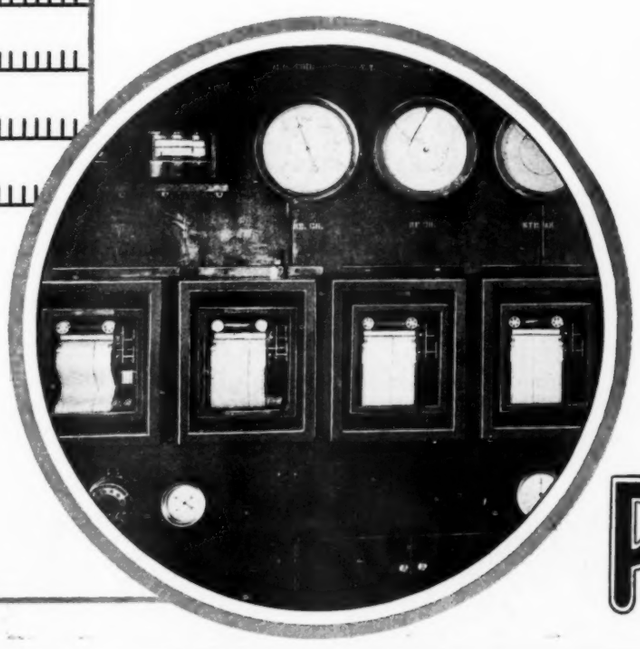
This objective has naturally strengthened the trend of the industry toward the use of bubble towers and liberal employment of *controlling instruments.*

This advanced practice is producing excellent results for a number of prominent refiners through the use of Brown Automatic Control Pyrometers for the regulation of cooling oil or water supplies controlling their bubble towers.

Simultaneously other Brown Instruments at the same plants are promoting fuel economy at still furnaces, and by indicating, recording or controlling still pressures and temperatures, help the operators to secure proper vaporization within desired limits.

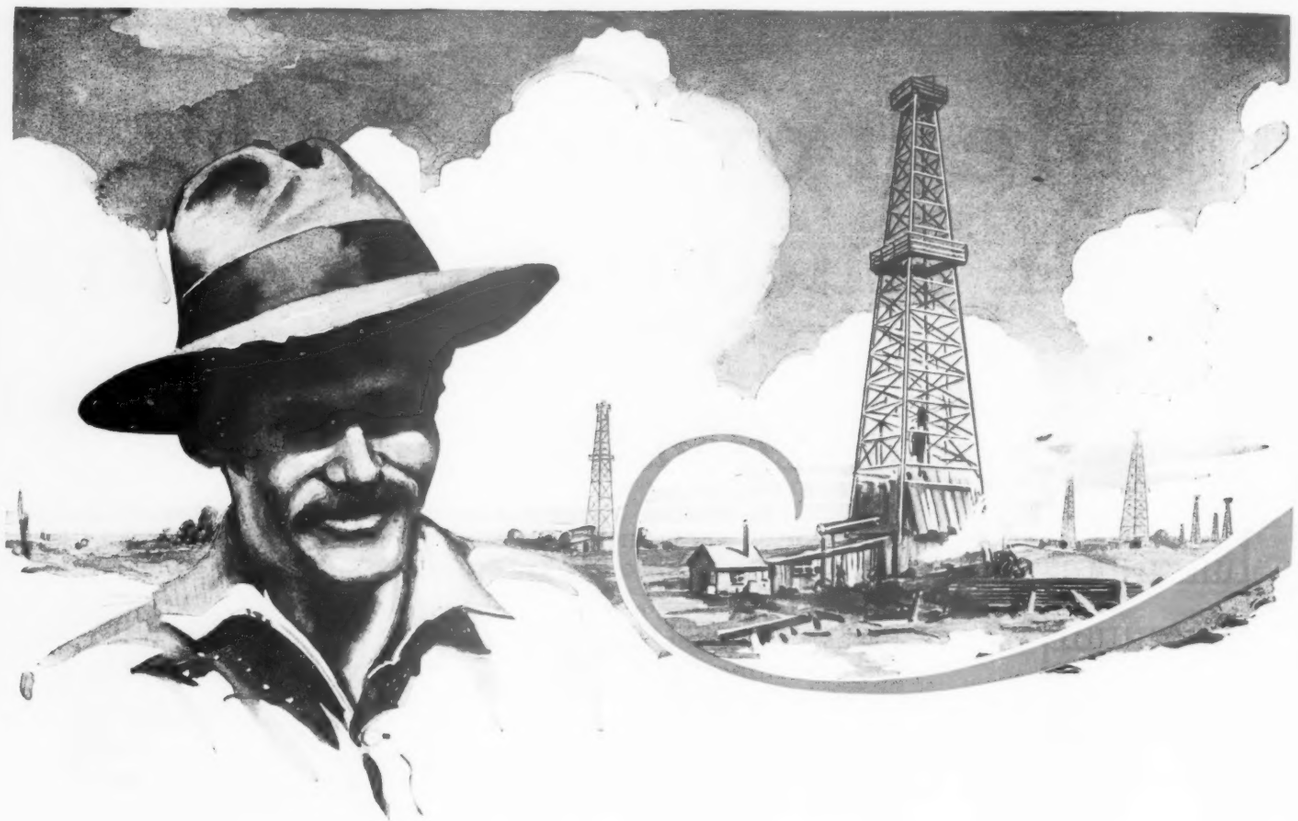
Whatever your plant layout, Brown Instruments can be fitted into your present practice or plans for development on a very advantageous operating basis.

Ask us to help you.



Address: The Brown Instrument Company, 4482 Wayne Ave., Philadelphia, Pa., or one of our District Offices in New York, Boston, Pittsburgh, Cleveland, Columbus, Detroit, Chicago, Indianapolis, Birmingham, St. Louis, Tulsa, Houston, El Paso, Los Angeles, San Francisco, Denver, Salt Lake City, Montreal.

BROWN PYROMETERS



"Thought I was too old to learn any new tricks, but—

after watchin' my next-door neighbors make hole with a Franklin Valveless Oil Drilling Engine I'll have to admit that my old boiler ain't in it for speed or economy, compared with that Franklin Valveless.

We both spudded in the same day, yet they were passin' the 2000 ft. mark when my outfit was bangin' away at 1800. And what it's cost them to run that engine wouldn't keep my boiler hot for a week.

I always had the idea that those oil and gas engines weren't flexible enough to do a good job of drilling, but the way that Franklin picks 'em up and lays 'em down suits me. No water to carry, no fires to tend, and they hauled the whole she-bang out here on one truck!

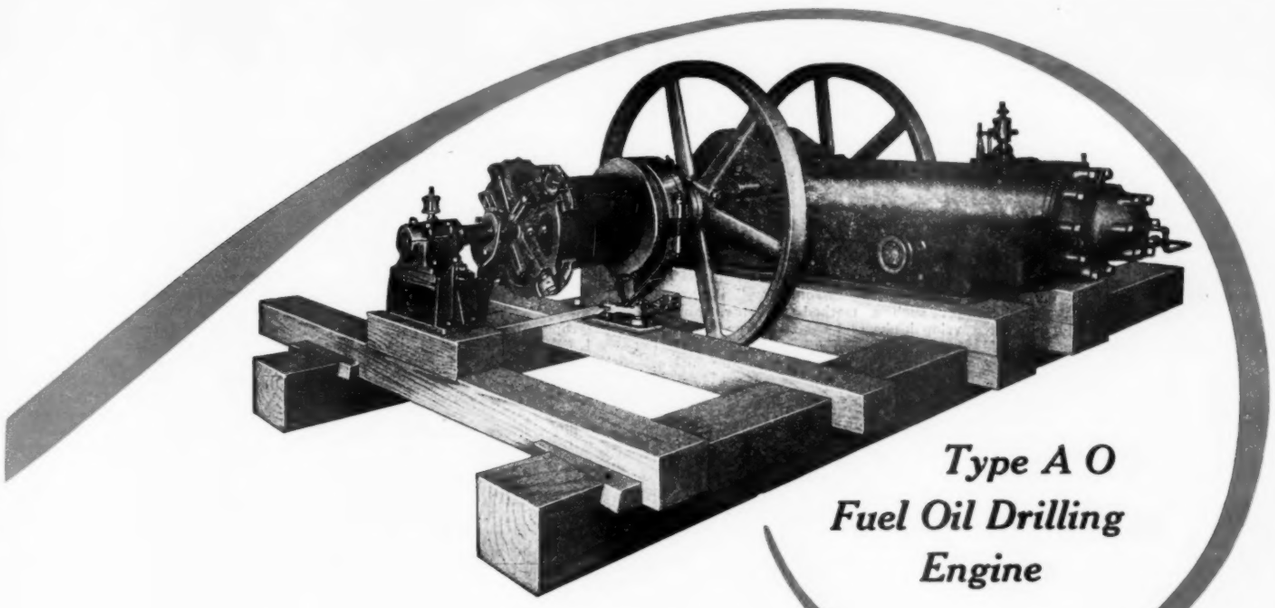
If you hear of anybody that wants a steam outfit, let me know. He can have mine cheap. I'm gettin' a Franklin Valveless."

Approximately 90% of Franklin's sales have come through repeat orders from satisfied users or from drillers who have watched these dependable, economical engines *on the job.*

Get in touch with the nearest distributor and ask him to drive you out to a well drilled or pumped with a Franklin Valveless.

FRANKLIN VALVE

THEY BEAT STEAM



Type A O Fuel Oil Drilling Engine

Convertible—Fuel Oil or Gas

If you're drilling with a Franklin Valveless Oil Engine and you move to a territory where gas is plentiful and cheap, you can convert your oil engine into a gas engine in two hours—simply by changing cylinder heads and replacing fuel pump with magneto and you've got the most efficient gas engine made. Built in sizes for any depth Cable Tool Drilling.

SERVICE

Even though Franklin Valveless Engines can be set up and operated successfully by an inexperienced crew, our distributors will furnish upon request a factory mechanical expert to demonstrate and assist in the economic use of these power plants. As for repairs—there are plenty of Franklin Engines that have drilled from 10 to 18 wells without a cents' worth of repair or replacement!

PRICES

For Mid-Continent and Western Service **$3,700.00**

For Eastern Service **$2,600.00 and $3,350.00**

FRANKLIN VALVELESS ENGINE COMPANY

FRANKLIN, PENNA.

Distributed by

Atlas Supply Company
Muskogee, Okla., and Branches

New Martinsville Supply Company
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LESS ENGINES

AT EVERY TURN

XUM

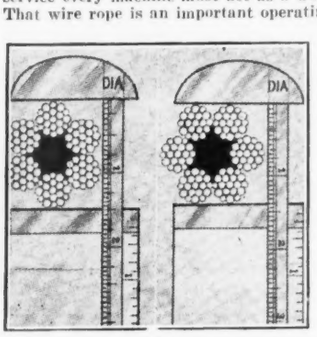
Proper Maintenance of Wire Rope

There Is a Best Way in Measuring, Unreeling, Lubricating, Seizing and Splicing. Special Care of Drilling Lines

By Walter Voigtlander, M. E.
Rope Engineer, American Cable Co.

Most oil operators will subscribe to any reasonable policy or method that will reduce operating expenses at no sacrifice to efficiency. Naturally the interest in such a method will be greatly increased when it is shown that the departure from standard practices will not only decrease expenses but simultaneously increase efficiency.

It would perhaps be improper to say that one part of a rig was more important than another part, since all parts are so interdependent that to give efficient service every machine must act as a unit. That wire rope is an important operating



(Correct) (Incorrect
Plate No. 1. Illustrating by contrast the correct and incorrect method for measuring wire rope.

element in rotary drills, sucker rod pulling machines or other oil field equipment will be agreed by all, however, and it is the twofold purpose of this article to show how a possible change or correction in wire rope usage may both decrease operating expense and increase general efficiency; and to present the best known methods for wire rope maintenance.

How to Measure Wire Rope

There is only one way to correctly measure wire rope and that is shown in contrast to the incorrect method, by the accompanying illustration (Plate No. 1). It is highly important that the proper size of rope be employed since an undersized rope will not give the degree of service that should reasonably be expected while an oversized rope represents needless investment and will not properly operate over sheaves grooved for smaller ropes. More important, however, is to have the rope and the sheave properly fitted. Wire rope should not be allowed to travel over a sheave wherein the groove is too small for its diameter. A pinching sheave will do more damage to a wire rope in one hour than a properly grooved sheave in an entire week or more. Sheaves grooved one-sixteenth of an inch larger than the diameter of the rope will lengthen the life of the rope several times, as compared with rope life on pinching sheaves. Since sheaves are cheaper than good wire rope, there is small economy in continuing the operation of improperly grooved sheaves. Also, the tread diameter of the sheave or drum greatly affects rope life. Larger diameter sheaves should be used wherever possible.

Uncoiling or Unreeling Wire Rope

Wire rope is ordinarily shipped and received either in coils or on reels. When uncoiling or unreeling wire rope it is very essential that no kinks be allowed to form. Once a kink is made, no amount of twisting or strain can take it out and the rope is unsafe for work. Never uncoil a wire rope as might be done with a rubber hose or manila hemp rope. Lift the coil to its edge and unroll the coil, allowing the rope to lie flat until used. Contrasting methods are shown in the accompanying reproduction (Plate No. 2).

When wire rope is received on a reel it must never be taken off or unreeled, as shown in the "wrong way" illustration, for such a method will invariably develop kinks and spoil the rope. If jackbrackets for the reel are unavailable (as shown in Plate No. 2-A) set up on blocking so the reel can rotate.

Lubrication

The cores of practically all good brands of wire rope, both the preformed and nonpreformed types, are thoroughly impregnated with a commercial chemically-neutral rope oil. While the core retains a liberal supply of this lubricant which gradually oozes out as the rope is used, still, frequent application of a good lubricant during service is necessary to prevent the core from becoming dry or rotting. A dry core will both wear and crush more quickly than one that is thoroughly lubricated. It will also absorb moisture readily with the result that the core will deteriorate rapidly and the inner wires corrode.

The smaller the sheaves or the heavier the tension on the rope, the more often should the rope be lubricated so as to prevent the too rapid wearing of the core

Plate No. 2. How to and how not to handle wire rope. See text for detailed explanation.

in the first case and the excessive crushing in the latter case.

A good lubricant will retard corrosion of the wires, slacken deterioration of the core, reduce internal friction and decrease external wear. The lubricant should be thin enough to penetrate the strands and the core but not so thin as to run off the rope. Ordinarily, a thick, semi-plastic compound applied hot and in a thinned condition is best whenever possible. It will penetrate while hot, then cool to a plastic filler, thereby preventing the entrance of water. In this way the inner wires and cores are both preserved and lubricated.

To properly lubricate with a heated lubricant, it is necessary to have the rope run slowly through the tank of heated oil. In this way proper penetration is effected. Where this is not possible, an application of a thinner, unheated lubricant will give better and more practical results.

It is well to lubricate a rope just after installation and before running in service, particularly if the rope has been kept in storage for some time.

Seizing

The end of an ordinary wire rope should have at least three seizings to prevent unlaying, which, if it occurs, would render the rope useless. The seizings may be replaced by fittings if they prevent unlaying. Annealed iron wire should be wound tightly in a close helix around the rope.

1. Wind the seizing wire on the rope by hand, keeping the coil together and considerable tension on the wire, winding over from left to right as in Figure 1, Plate No. 4.

2. Twist the ends of the wire together counter-clockwise by hand so that the twisted portion of the wires is near the middle of the seizing.

3. Using Carew cutters, tighten the twist just enough to take up the slack. Do not try to tighten the seizing by twisting.

4. Tighten the seizing by prying the twist away from the axis of the rope with the cutters, as indicated in Figure 4.

5. Tighten the twist as in No. 3. Repeat 4 and 5 as often as is necessary to make the seizing tight. Cut off the ends of the wires and pound the twist flat against the rope.

6. The appearance of the finished seizing should appear as in Figure 6.

Any annealed low carbon steel wire may be used for seizings, the size ranging from No. 10 to No. 18, depending upon the diameter of the rope. This method is taken from the United States Government Master Specifications No. 297.

How to Splice Wire Rope

In order to prevent appreciable loss of strength at the splice, it is customary to

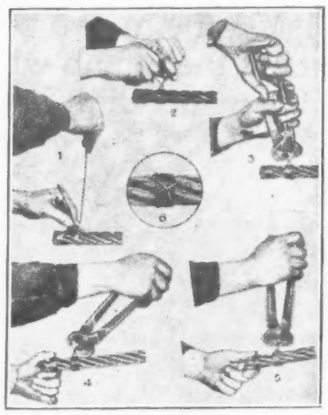


Plate No. 4. Illustrated here is the proper method for seizing wire rope.

make the length of splice not less than that given below for ropes of different sizes:

Diameter of Rope	Length of Splice, Ft.
½ inch	15
⅝ inch	20
¾ inch	24
⅞ inch	28
1 inch	32
1⅛ inch	36
1¼ inch	40

In splicing the two ropes, fasten the ends so that they overlap, allowing for a splice of from 15 to 40 feet as indicated by the above table. For purposes of explanation, we will assume a 30-foot splice. First wrap or tie each rope securely with iron wire 30 feet from the end, then unlay all strands 15 feet as shown in Figure 2, Plate No. 3, cutting away the hemp core to permit bringing the two unstranded ends together in order that the several strands will interlock as in Figure 3.

Take strand a and unlay it until the wire binding is reached, and in the open groove place strand A. Lay A in tightly as shown in Figure 4, making the twist agree exactly with the twist of the open groove. Proceed in this way until all except two feet of A are laid in and then cut off a and A, leaving ends about two feet long. Now unlay strand B in the opposite end and in its place put strand b, stopping the end of the rope in the corresponding position to A, Figure 4.

Subsequently c will be replaced by C, but this should be stopped six feet short of junction of A and a, as shown in Figure 5. Similarly D should be replaced by d and the end stopped six feet short of Bb. Proceed similarly with Ee and Ff, stopping the ends six feet short of Cc and Dd respectively.

The rope will not present the appearance shown in Figure 5 and the only remaining step is to tuck in the ends in such a way that the diameter of the rope will not be increased where the ends are tucked in. This is done by removing the hemp center and putting the ends of the strands in the place previously occupied by the core. To do this, it is first necessary to open up or untwist the strands at Aa so that the hemp center can be seized with a pair of pliers and pulled out. Then a marline spike is inserted under the two strands nearest the end of the rope, and after starting the loose end into the space left vacant by the hemp, rotate this marline spike so as to force the strands into place. Repeat this operation at Bb, Cc, Dd, Ee and Ff, then hammer the spliced rope lightly with a wooden or copper mallet to give the rope a uniform diameter.

Drilling Lines

In the interest of increased drilling line efficiency here are 17 points it would be well to keep firmly fixed in mind:

1. To prevent dog legs and kinks, set your reel of rope on a shaft supported on blocks or jacks and pull the rope from

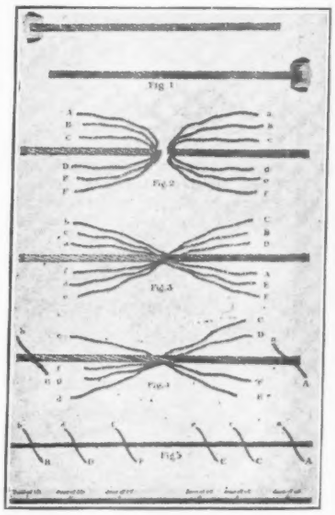


Plate No. 3. Illustrating the method for splicing wire rope. For details see text of article.

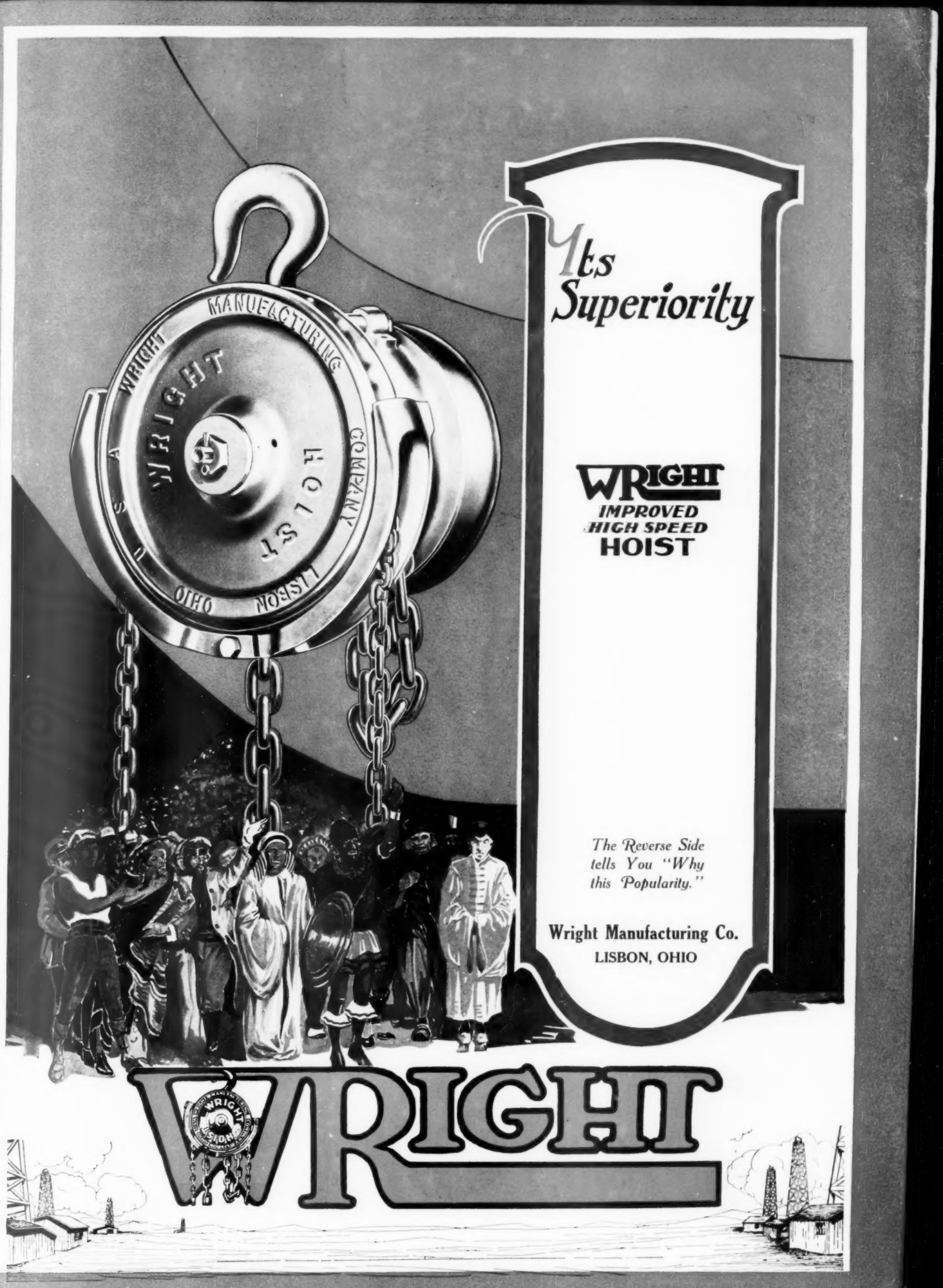
under the reel, rotating the reel. Never pull loops over the sides of the reel.

2. Don't pull under girt or sill or any edge.

3. Don't spool rope unless your crown pulley lines up with spooling flanges.

4. Tie your rope securely so as to

(Continued on Page 120)


Its Superiority
WRIGHT
IMPROVED
HIGH SPEED
HOIST
The Reverse Side tells You "Why this Popularity."
Wright Manufacturing Co.
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21 Points Plus of Hoist Superiority found in the WRIGHT

1 TIMKEN TAPERED ROLLER BEARINGS
Eight to each trolley.

2 STEEL SIDE PLATES
Bumpers protect wheel flanges and treads.

3 CHILLED TREAD WHEELS
Absolute roundness insures ease in handling load.

4 STEEL EQUALIZING PIN
Permits placing trolley on I-Beam at any point and insures equal distribution of the load on the four Wheels.

5 STEEL HANGER PLATE
May be eliminated and hook hung on equalizing pin to save headroom.

6 STEEL HOOK—DROP FORGED—PROOF TESTED
The strongest part of the hoist This hook never opens to drop the hoist and load.

7 STEEL DROP FORGED CROSS HEAD

8 SAFETY LOAD CHAIN GUARD
Completely shrouds the upper half of load wheel, holding six links of load chain in wheel at all times.

9 STEEL LOAD WHEEL
Special analysis electric steel casting, annealed.

10 OIL TUBES
To insure positive and easy lubrication at vital points.

11 MAIN DRIVING SPINDLE AND PINION
Upset forging S.A.E. steel 1035 —heat treated.

12 BRONZE BUSHED LOAD SHEAVE

13 BALL BEARING DRIVING SPINDLE
Where speed is greatest. Not subjected to heavy and shock loads. Eliminates wear on this part.

14 STEEL SUSPENSION PLATES
An extra precaution to care for heavy overloads.

15 NON FOULING HAND CHAIN GUIDE
(Malleable Iron)

16 GEAR COVER—EXTRA HEAVY
Pressed from ⅛" plate. Insures permanency.

17 STEEL CHAIN—ELECTRIC WELDED
Special heat treated and proof tested. An elastic limit 4½ times rated capacity, and breaking strength 6½ times rated capacity

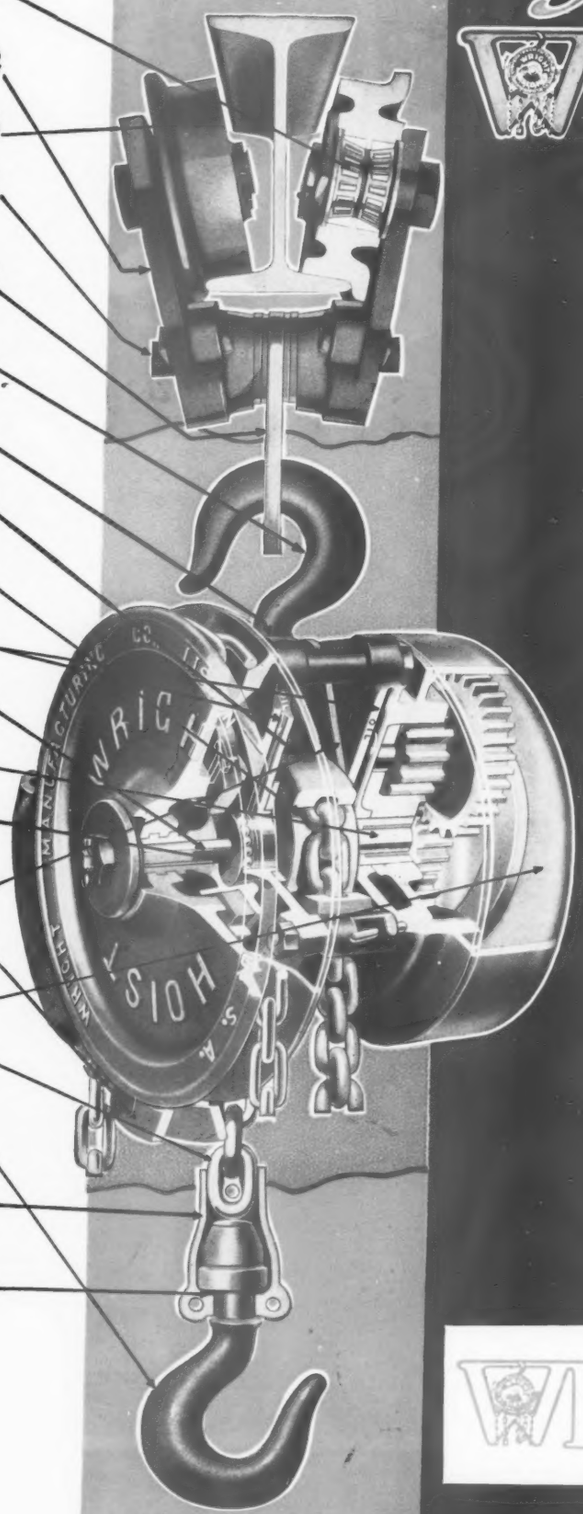
18 STEEL HOOK—DROP FORGED —PROOF TESTED
Never opens to drop the load.

19 DETACHABLE STEEL COUPLING—DROP FORGED
Completely enclosed Ball Bearing. Easily detachable to renew chain. Load is *not* held on connecting bolts but by the forgings.

20 BALL THRUST BEARING ON BOTTOM SWIVEL HOOK
Permits easy swiveling of load. Insures load chain hanging straight and feeding perfectly straight into load sheave pockets. This insures longer life to chain and wheel the greatest point of friction and wear.

21 OIL CUPS SPRING COVER IN ALL OIL HOLES

Ask Us About Them



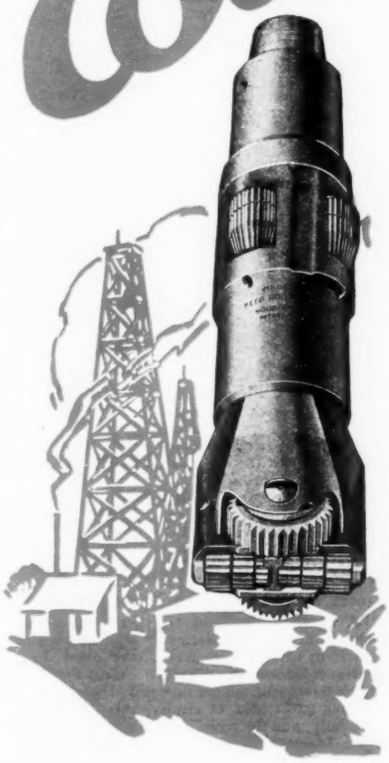
WRIGHT

A Few Years Ago ~

A Revolutionary Innovation In Rock Drilling

Today ~

A Necessary Part of the Drilling Equipment in any Rotary Field ~ ~



The cross-roller action of the cutters, with the full force of the slush column descending directly upon them, makes the Reed Rock Bit a tool that will penetrate, with ease, even the hardest rock.

The finest of alloy steels—carefully machined and properly heat treated—give this bit the necessary hardness to withstand continued operation, considerably lessening the "time out" generally required for replacement of the quickly worn out cutting-edge of ordinary bits.

By increasing the footage rate while the bit is at the bottom of the hole, by cutting down on "time out" for changing bits, and by always making a *full-gauge hole,* the Reed Rock Bit plays a very important part in reducing footage cost when drilling in hard rock.

Reed Rock Bits

Reed Roller Bit Company

HOUSTON LOS ANGELES

"KLEIN"

Oil Men Know That Name

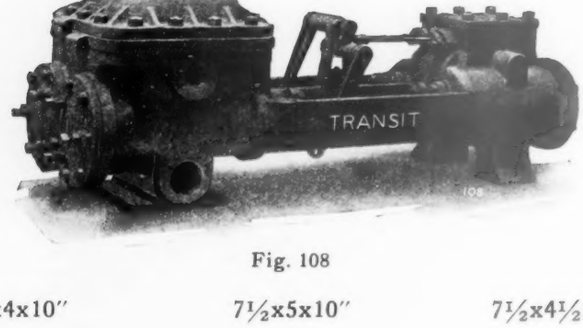


Fig. 108

7½x4x10″ 7½x5x10″ 7½x4½x10″

This pump is still being made just as it was originally, after being designed by John S. Klein, while he was Superintendent of this Company, many years ago.

They are especially recommended for service in the oil fields, where for nearly forty years they have given the utmost satisfaction.

These pumps are simple, compact, rigid and extremely accessible. They are fitted with separate discharge valve plates, liners of either brass tube or removable cast brass, and valves of any standard type to suit conditions.

Descriptive Bulletin No. 102-B on request.

NATIONAL TRANSIT
PUMP & MACHINE CO.
OIL CITY, PA.

DISTRICT OFFICES

New York Philadelphia Pittsburgh
Cleveland Houston Tulsa Denver

CALIFORNIA FIELDS

(Continued from Page 62)

ter No. 2 San Gabriel. The only other work being done consists of the Union's No. 1 Bryant, which is in a brown shale at 5,343 feet, and the Associated's fifth structure survey hole on the Hellman property, which is down 1,403 feet.

The General Petroleum's No. 21 Santa Fe, a Bell zone completion in the Santa Fe Springs Field, registered an initial daily production of 160 bbls. of rather dirty 25.1 gravity oil from 3,900 feet. This well, together with Nos. 22 and 24 on the same lease, was spudded in less than 60 days ago and, judging by the depths of the two drillers approaching the 3,800-foot level, the company should increase its daily production still further within a month. The Standard's No. 19 South Whittier Community which, together with the new work being done by the General Petroleum on its Santa Fe lease, was started as a result of the recent completion of several fairly large flowing wells, is rotating ahead in a sticky blue shale at 2,550 feet.

Deepest Well, 8,046 feet

The Chanslor-Canfield Midway Oil Co., instead of making a production test of its No. 96 Olinda in the Fullerton Field at 8,034 feet, resumed drilling and carried the hole down to 8,046 feet, at which point it is understood a 4½-inch liner will be run in and a production test made. This deep hole has shown a little sand around the 8,000-foot level but it is hardly likely it will result in commercial production, although a little oil might be secured. The General Petroleum has just completed No. 12 Tonner in the Fullerton Field at 4,993 feet but, notwithstanding this depth, is not showing up as well as might be expected and nothing big is anticipated. The General Petroleum has three other drillers and a new rig going up on the Tonner lease and is running three strings of tools at Richfield.

The Pan American cemented a string of 12½-inch in No. 1 Chancorina in the Rideout Heights section of the old Whittier Field at 2,639 feet, approximately 70 feet off bottom, at which the company cored a fairly promising oil sand. It is the intention to drill ahead in an effort to secure a more favorable penetration before putting the well on the beam. The company's No. 1 Broderick, about a half mile away, is drilling ahead in a hard gray sand at 4,900 feet. The McCaslin Oil Co.'s No. 2 Patton-Gregg has not yet picked up the pay which resulted in the successful completion of No. 1 at 830 feet, notwithstanding it is something like 70 feet deeper and but a location removed. The York-Smullen Drilling Co. has a rig standing for No. 2 Blakeboro-Simmons, also in the Rideout Heights Field, and it is understood spud is scheduled for early next week.

Ventura

The Shell company finished another excellent flowing well in the Ventura Avenue Field when No. 8 Edison was turned loose from an even 6,000 feet. This new well came in flowing 2,922 bbls. of clean 30.2 gravity oil daily and is making a little better than 7,000,000 feet of unusually wet gas in addition to the oil. The Associated will probably list the next completion in this field as No. 33 Lloyd is looking exceptionally good at 6,200 feet. None of the General Petroleum's various holes are expected to come into production for several weeks as none is yet deep enough to pick up the pay.

The Bolsa Chica is stepping right along with No. 2 Hartman, its second well in this area, and although the hole was only recently spudded in it is already down 3,185 feet. G. J. Magenheimer has pulled out of a difficult fishing job wh'ch developed at 3,737 feet and from preent indications will be in a position to resume drilling within two or three weeks. Considerable new work is getting under way in various parts of the field and, judging from present indications, there will be no cessation at least not until all operators have thoroughly protected their holdings by two or more lines of offsets. The Shell either has rigs up or material on ground for three new holes on the Edison lease and two on the Taylor property, while the Associated has six potential drillers on the Lloyd lease and two more on the Hartman. The General Petroleum is building steel rigs for Nos. 9 and 12 on the Barnard lease, having recently spudded in Nos. 5-A and 8.

Mount Poso Area

Developments in the Mount Poso area were of a somewhat disappointing nature and it begins to look as though this field will be considerably smaller than expected. Several wells which should have picked up the Vedder sand have failed and as a result operators are somewhat in doubt as to just where the field will be. When the Shell brought in No. 1 Vedder a short time ago a large leasing campaign was undertaken by other operators and practically all available acreage within a radius of 10 miles was leased. It is no secret some of those who went in on a large scale shortly after completion of the discovery well are considerably worried over recent developments, as a greater part of the acreage obtained will never be productive unless another field is opened. The next completion expected in the Mount Poso Field is the Union's No. 1 Sarret, which picked up the top of the pay at 1,858 feet, at which point a string of 12½-inch was landed. No. 1-A Porter of the Petroleum Securities, on the other hand, has taken on a rather doubtful aspect at 2,300 feet in view of the failure of the well to pick up the Vedder sand above this point. No. 1 Sarret is a north line offset to the Shell's No. 1 Vedder, while No. 1-A Porter is about 2,000 feet southwest.

Midway-Sunset

The North American Consolidated finished two new wells in the Midway-Sunset area but only one, No. 42 in Section 30-31-24, was successfully put on production. This well, drilled to 4,104 feet and finished with an 8⅝-inch oil string, started off pumping 80 bbls. of clean 23.6 gravity oil daily. The Honolulu Consolidated's No. 76 in Section 6-23-24 was finished as a 60-bbl. pumper from 2,899 feet and, while the output is cutting about 10 per cent, it should clean up in time. The Midway Northern's No. 15 in Section 32-12-23, the largest well finished during the week, started off doing 246 bbls. of clean 26.1 gravity oil daily from 3,500 feet, the hole being finished with a 6¼-inch oil string. This well is in close proximity to the Obispo's No. 6, which succeeded in getting production from the brown shale at 4,000 feet, about a year or so ago. The Obispo, by the way, failed to finish No. 11 in the same section recently and, following this unsuccessful attempt to get production in the brown shale at 3,900 feet, started plugging back by stages, stopping every now and then for a test.

Maricopa

Two new wells were recently spudded in at Maricopa, one by the California Petroleum on the Calitroleum property and the other by the Empire Fuel & Gas Co. in Section 4-32-24. The Union's No. 1 Houchin is perhaps one of the most interesting wells in this field at present and it is believed this hole, an offset to the Standard's No. 1 Rass, will be given a test within two or three weeks. The Union's No. 1 Boss, an offset to No. 2 Rass of the Standard, is drilling ahead in a blue shale at 4,940 feet with an excellent chance of coming into production within 30 days.

The Cymrick Oil Co.'s No. 8 in Section 26-29-21, at McKittrick, was listed late in the week for completion at 1,280 feet, the initial production being given as 96 bbls. of 14.1 gravity oil daily. George F. Getty added a nice well to his list of producers on the Kern front when No. 5 Leonhardt in Section 14-28-27 was put on the beam at 2,162 feet. It started off pumping 75 bbls. of comparatively clean 13.9 gravity oil daily, which is considerably higher than the average well production in this field.

Southern California Wildcats

The Union company's No. 1 Howland in the El Segundo area is rotating ahead steadily in a sandy shale at 5,118 feet, but due to the depth and absence of upper

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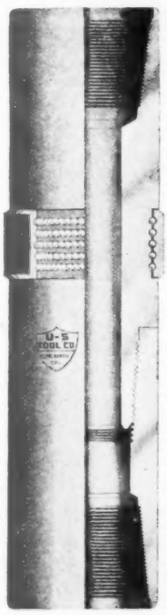

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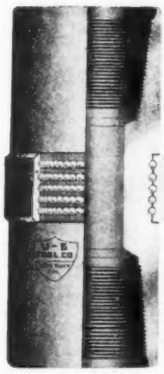

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showings, the outlook is decidedly unfavorable. The Julian Petroleum's No. 1 Trust in the Manhattan area is also looking rather discouraging, notwithstanding a slight oil showing was logged at 5,685 feet. Neither the Standard's No. 1 University nor No. 1 Sesnon of the Petroleum Securities, both in the San Fernando Valley, has shown any unusually favorable indications and these two wildcats have all the earmarks of dusters. The Van Nuys Community Oil Co., which has been experiencing some little difficulty in drilling its wildcat near Van Nuys in the San Fernando Valley, is preparing to resume work at 3,701 feet and, if reports are correct, this well might bear watching a little later. Some promotion trouble has been occasioned but this condition has been ironed out and the present backers of this well maintain it is in the Miocene.

The Milham Exploration Co. ran into a mean fishing job in its Playa del Rey wildcat at 6,058 feet and, unless a speedy recovery is effected, it is believed the hole will be abandoned. No. 1 Merlo of the Barnsdall, a wildcat in the Avocado Heights area near Puente, is rotating ahead at 4,450 feet, with the outlook none too favorable, although the area cannot be condemned at this depth. The Marine is making unusually rapid footage in its Bellflower wildcat, No. 1 Strong, but is being placed on the doubtful list at 4,670 feet. The Southern California Drilling Co. is building a rig for No. 1 Matteson, approximately 2 miles north of the Pan American's No. 1 Pacific Southwest, a duster drilled in the El Segundo area back in 1924 and abandoned at 5,244 feet. The Standard also drilled a duster in this general locality, its No. 1 Extension, about a mile away, being abandoned at 7,400 feet. Neither the Associated's No. 1 Cypress at Inglewood, the Smith Petroleum's test at Hawthorne nor Featherstone & Preston's No. 1 Blinn at Clearwater showed any change for the better.

Northern California Wildcats

The most promising wildcat in northern California is the Bolsa Chica's test in the Kettleman Hills and, although the present oil sand at 2,340 feet may not result in commercial production, it is distinctly encouraging. This, the third showing found in the present hole, yielded approximately 70 bbls. before being bailed dry. It is unknown whether the sand is capable of sustaining steady production, as no attempt has been made to put the well on a pumping test, but it is understood the company will put it on the beam within two or three weeks if the hole fills with oil in the meantime. Of the 8 or 10 wildcats drilled on the three separate structures in the Kettleman Hills the Bosa Chica has been the only company actually to recover any oil. It will be recalled, however, that the General Petroleum encountered several favorable indications a year or so ago around 5,000 feet in No. 1 Oschner but commercial production was not secured and the hole was later abandoned due to mechanical trouble below the 6,000-foot level.

The Milham Exploration Co. has just finished rigging up at Buttonwillow for a new test and spud will probably be made within 10 days, as most of the preliminary work is now out of the way. This general territory has always been regarded rather favorable but none of the operators who have prospected there have succeded in finding anything resembling production. The Union is also expected to start work on a new wildcat within two weeks, as a rig is going up on the Gill property in Section 8-28-27, not far from Famosa. The Shell's No. 1 Berlywood at Moorpark has just passed the 6,100-foot level and, while the outlook is not any too encouraging, it is believed the company will continue drilling, as it may be necessary to make at least 7,000 feet of hole before proving or disproving the area.

The Miley Exploration Co. is hauling in material for a rig near Goleta in Santa Barbara County and the bit in this test will probably be started downward around the end of the month. None of the several wildcats being drilled in Monterey County showed any favorable improvement, although the Harriman-Jones Oil Co. claims a slight showing of gas. The Shell's Petaluma test is rapidly approaching the point at which production is expected and something definite might materialize within two weeks. Before the hole was started, geologists estimated the productive horizon to be around 2,500 feet and, since the hole is already down 2,480 feet, it is believed the company will core solidly for the next 50 or 100 feet.

LOUISIANA WILDCATS

(Continued from Page 56)

was abandoned in blue shale and streaks of brown lime at 2,335 feet. Gilliland Oil Co. and Ramsey's No. 1-D Taylor, Section 14-23-8, is bailing oil and a little salt water from 4,530 feet. Shaw & Rouch's No. 1 King, Section 20-21-8, is drilling at 1,990 feet. Triangle Drilling Co.'s No. 1 Keen, Section 7-19-5, is drilling sandy lime at 4,600 feet.

DeSoto Parish

Graise & Hintze's No. 1 Riggs, Section 27-14-13, is drilling at 400 feet. Dixie Oil Co.'s No. 1 Jenkins, Section 9-12-11, is drilling hard gray lime at 4,660 feet. Magnolia Petroleum Co.'s No. 1 Bond, Section 27-12-11, is drilling lime rock at 3,981 feet. Snapp and associates' No. 1 Flores, Section 27-11-11, is drilling lime at 2,615 feet.

East Carrol Parish

T. A. Snell's No. 1 Abston, Crump & Wynn Co., Section 24-19-12e, is drilling green shale at 1,620 feet.

Grant Parish

Another pair of failures went down against Grant Parish last week. Bradley & Cozart's No. 1 Holmes, Section 16-9-1e, was abandoned in salt water sand at 1,614 feet and Holmes and associates' No. 1 Holmes, Section 17-9-1e, was dry and abandoned at 1,630 feet. Gulf Refining Co.'s No. 2 L. Swope, Section 17-9-1e, cored brown shale showing oil at 1,413 feet. Holmes and associates' No. 2 Holmes, Section 17-9-1e, is a derrick. Humble Oil & Refining Co.'s No. 11-A L. & A., Section 20-9-2w, is a rig and location was made for No. 14-A L. & A., 300 feet north and west SE cor. Section 25-9-2w. H. L. Hunt's No. 1 Matthews, Section 15-9-1e, is drilling at 1,000 feet. J. J. Long and associates' No. 1 Calhoun, Section 4-7-4w, is drilling at 1,130 feet. The Texas Company's No. 1 Swope, Section 16-9-1e, is being drilled to 1,589 feet. Tunica Petroleum Co.'s No. 8 L. & A., Section 11-8-2w, is a derrick.

Jackson Parish

Charles A. Ferguson's No. 1 Martin, Section 5-15-1e, is drilling in gumbo at 2,280 feet. El Dorado Chief Oil Co.'s No. 1 Jones, Section 3-14-4w, is drilling shale and boulders at 1,250 feet. Grigsby & Co.'s No. 1 Adams, Section 22-17-4w, is shut down for orders at 1,438 feet. Louisiana Petroleum Co.'s No. 1 Davis Theus, Section 20-16-3w, is drilling shale and boulders at 2,305 feet.

Lincoln Parish

Arkansas Fuel Oil Co.'s No. 1 Lincoln Land Co. topped the Blossom at 2,282 feet and is drilling in shale at 2,952 feet. Buckley & Palmer's No. 1 Davis, Section 12-20-3w, is being washed to the bottom at 2,420 feet, corrected depth.

Natchitoches Parish

Brothers and associates' No. 1 Cockfield, Section 78-7-5w, is drilling at 1,562 feet. Davison and associates' No. 1 L. L. L. L. Co., Section 21-7-9, is a rig. Forrest, trustee's, No. 2 Ayers, Section 3-13-7, is drilling at 1,870 feet. J. B. Greer's No. 1 L. L. L. L. Co., Section 6-5-7w, is drilling at 2,570 feet. Humble Oil & Refining Co.'s No. 1 Nona Roge, Section 85-7-6, is shut down at 1,636 feet for a crew. Surface casing was set at 80 feet at McCormick and associates' No. 1 Russell, Section 41-10-7. Ohio Oil Co.'s No. 1 L. L. L. L. Co., Section 20-8-8w, is drilling shale at 1,316 feet. E. Self's No. 1 Fisher, Section 18-8-9w, is drilling at 815 feet. Weaver Brothers'

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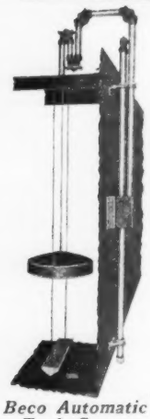

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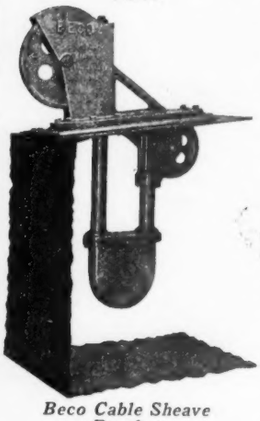

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Realizing the need for better tank equipment to guard against fire hazard and to facilitate the economical handling of oil, I began 12 years ago to specialize in the design of improved fittings. As a matter of fact I pioneered this phase of the industry.

For the purpose of carrying out the manufacture and distribution of these devices I founded the Oil Conservation Engineering Company, March, 1921, of which I was President until my resignation two years ago. The progress of the oil industry demanded constant improvements and in order to meet this condition and to adequately put into effect many advanced ideas in design, I severed my connection with the above mentioned firm and established the Brooks Engineering Corporation. During the past year we have brought forth a large number of tank fittings that are of advanced design, recognized as superior in every respect.

Incidently, my specifications during the past 12 years have never fallen down in a single instance and have been accepted by the largest oil companies in America.

It is my determination to continue aggressively meeting the wishes of the oil industry by offering the latest improvements and by rendering personal advisory service, as has been my record in the past. Consequently, when you are in need of tank equipment you can receive the services of the originator of practically all of the successful devices used on protected tanks and I wish to assure you that our service will meet with your unrestricted approval.

(Signed) Stephen H. Brooks

President.

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No. 1 fee, Section 4-7-7, is coring at 1,970 feet.

Rapides Parish

Hiney & Macke's No. 1 Barrow, Section 29-5-2e, has been started up after months of idleness and is drilling at 1,865 feet. F. Pacholik's No. 1 Voda, Section 12-4-1e, is drilling at 1,320 feet. Seip and associates' No. 1 Ball, Section 41-4-2w, is drilling gumbo at 1,580 feet.

Red River Parish

Gulf Refining Co.'s No. 1 England, Section 32-17-6e, is a riz.

Richland Parish

Gulf Refining Co.'s No. 1 Ches-Wyman, Section 23-18-8e, is fishing for bit in sand rock at 2,210 feet. Louisiana Petroleum Co.'s No. 1 Hicks, Section 22-17-6e, is drilling at 940 feet. Roxana Petroleum Corp.'s No. 1 Tensas Delta, Section 3-14-5e, is drilling at 100 feet.

Sabine Parish

A derrick is being built for L. M. Emlet's No. 5 Bowman, Section 9-7-12. The derrick was pulled in when the drill stem was pulled from the hole at 4,070 feet where it stuck. Magnolia Petroleum Co.'s No. 1 L. L. L. L. Co., Section 11-6-11, is drilling rock at 847 feet.

Tensas Parish

Spencer & Rhodes' No. 1 Somerset, Section 29-14-12, southwest of Quimby, was dry and abandoned at 2,537 feet.

Winn Parish

J. C. Long and associates' No. 1 Milam, Section 28-13-3w, is rigging. Ohio Oil Co.'s No. 2 Edenborn, Section 4-12-1w, is drilling at 2,060 feet.

LaSalle Parish

Tunica Petroleum Co.'s No. 12-A L. & A., Section 25-9-1e, was abandoned in salt water sand at 1,664 feet. Tunica company's No. 4 L. & A., Section 15-9-3e, was dry and abandoned at 2,180 feet. Tunica company's No. 11-A L. & A. is drilling in rock at 1,752 feet.

MEXICAN FIELDS

(Continued from Page 48)

340 feet, its No. 134, Lot 3 Cacalilao, is in blue shale at 250 feet. Cia. Pet. Maritime, No. 16 Ojital, Panuco, (federal zone), cemented 8-inch in gray lime at 1,320 feet. Mexican Gulf Oil Co.'s No. 18 Piedras, Panuco, is in gray lime with an oil show at 1,315 feet. Territorial Petroleum Co.'s No. 11 Ojital cemented 8-inch at something over 1,100 feet in gray lime and its No. 16, same, is in shale at 155 feet. Transcontinental Petroleum Co.'s No. 218, Lot 4, Cacalilao, is in lime at 2,175 feet; No. 231 is in shale at 500 feet; No. 273 is in the San Felipe at 1,400 feet, and in the Panuco, its No. 34 Barbarena cemented 10-inch in gray lime at 1,175 feet. Mordelo Vincent's No. 29, Lot 14 West Magnabes is being observed at 2,230 feet, white lime, where the test is making now 50 bbls. of oil and say 500,000 feet of gas.

At Ebano

In the Ebano sector, Mexican Petroleum Co.'s operations follow: No. 9 Ebano is in gray lime at 2,500 feet; No. 43 La Dicha is in hard black lime at 2,135 feet; No. 102 is in gray lime at 1,190 feet; No. 108 is in the same formation at 1,775 feet; No. 117 is in gray shale at 1,110 feet; No. 9 Mendez is in gray shale at 1,930 feet; No. 11 is in blue shale at 750 feet. No. 113 is in gray shale at 130 feet; No. 114 is in yellow clay at 85 feet.

South Fields

In the south fields, Huasteca Petroleum Co.'s No. 73 Cerro Azul is in hard gray lime at 1,852 feet; its No. 74 Tierra Blanca is in gray shale at 1,832 feet. No. 76 is in brown shale at 970 feet; No. 80 is in gray shale at 1,788 feet; Mexican Eagle Oil Co.'s No. 17 San Geronimo is in hard gray lime at 2,557 feet; No. 51, Lot 132 Chinampa, is in gumbo at 1,261 feet; No. 2 Poza Rica is in sticky shale at 1,150 feet. Cortez Oil Corp.'s No. 13 Aguada is in shale at 200 feet.

Northern Miscellany

In the miscellaneous northern fields interest is being centered more or less on the Tamesi River sector known as Altamira. National Lines, especially, is getting in there as fast as circumstances will permit in the hopes of getting production to offset its failing wells in its Chapacao right of way. The National Lines has already finished two dry holes there but it is going ahead on the federal zone on the Tamesi River, the district in question, with considerable vigor. Its list there now follows: No. 54 Altamira is rigged waiting permit; No. 55 is rigging; No. 63 cemented 8-inch in gray lime at 1,100 feet; No. 67 is in hard blue shale at 1,085 feet; Nos. 82 and 94 are rigging, and across the river, in the Chapacao, its No. 71 is a derrick. Rich Mex Oil Co.'s No. 2, Lot 26 Altamira, cemented 8-inch in gray lime at 1,110 feet, and its No. 10, same cemented around 1,200 feet in the same formation.

In the Corcovado sector, La Corona Petroleum Co.'s No. 26, Lot 6, is in gray lime at 1,655 feet. Mexican Gulf Oil Co.'s No. 48 Chapacao (Corcovado) is in white lime at 2,036 feet. No. 51 is in gray lime at 1,075 feet.

In the Caracol, Mexican Petroleum Co.'s No. H-6 is in gray shale and shells at 2,750 feet, and its No. H-9 is in gray lime at 2,240 feet.

In the Topila sector, La Corona Petroleum Co.'s No. 21 is in the Tamasopa at 2,727 feet. Globe Petroleum Co.'s No. 1, Lot 80 Quebrache, is in gray shale at 950 feet. Ita Mex Oil Co.'s No. 23 La Mula is in the San Felipe at 2,441 feet. The Texas Company's No. 1, Lot 19 Pac. de Aguacate is in brown and gray lime at 2,150 feet.

In Limon, Cia. Pet. Franco Espanola, No. 33-A is in gray lime at 1,970 feet.

Personal Mention

J. A. Brown, veteran vice president and general manager of the Transcontinental Petroleum Co. (Standard Oil of New Jersey), is leaving Tampico for a tour of the foreign holdings of the parent company. He is being succeeded in Mexico by C. H. Leib, assistant general manager and chief engineer; and in Mr. Leib's place George Webber, formerly head of the Transcontinental's marine department, becomes assistant general manager.

L. G. Huntley, the well known geologist of Pittsburgh, was in Tampico for two days recently, looking after some interests he has here.

D. W. Reid, vice president and general manager of the Southern Pacific oil interests in Mexico, with headquarters at Tuscon, Ariz., was in Tampico last week leaving here for Mexico City.

SWEDEN INCREASING CONSUMPTION OF OILS

By Charles E. Kern
Washington Bureau,
The Oil and Gas Journal.

WASHINGTON, D. C., Sept. 11.—The increasing use of motor cars, Diesel engines and other fuel-burning appliance is causing a marked increase in the consumption of gasoline and other fuel oils in Sweden, according to a report to the Department of Commerce.

Sweden depends almost entirely on foreign countries for its requirements of mineral oil as practically none is produced within the country. Before the war a little oil was produced from shale but large shale operations on this field are commercially unprofitable with petroleum and gasoline at their present price levels.

Experiments have recently been conducted in Sweden in order to promote the use of substitutes which will be able to compete successfully with imported petroleum products. Among these are "lightbenty," a motor fuel consisting of an alcohol-gasoline mixture.

Some experiments also have been made in the use of charcoal gas, but so far this fuel has been confined to heavier trucks and other vehicles used in the lumbering districts.

HOCKENAUER RECOVERING

Carl Hockenauer of the A. O. Smith Corp., of Milwaukee, is recovering from a recent operation for appendicitis and is expected to resume his business duties within a week.

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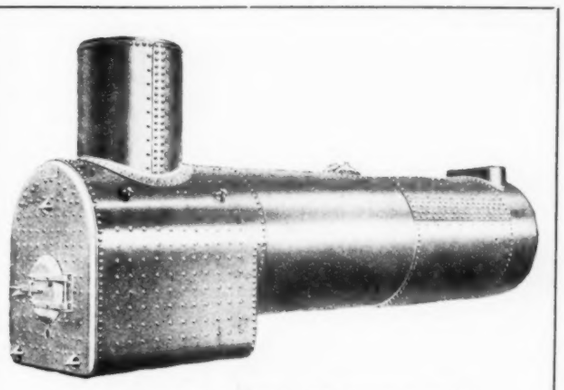

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The boiler was raised from cold water to 100 lbs. steam in one-half an hour. This is merely an example of what the DONOVAN can do, and on low pressure gas at that.

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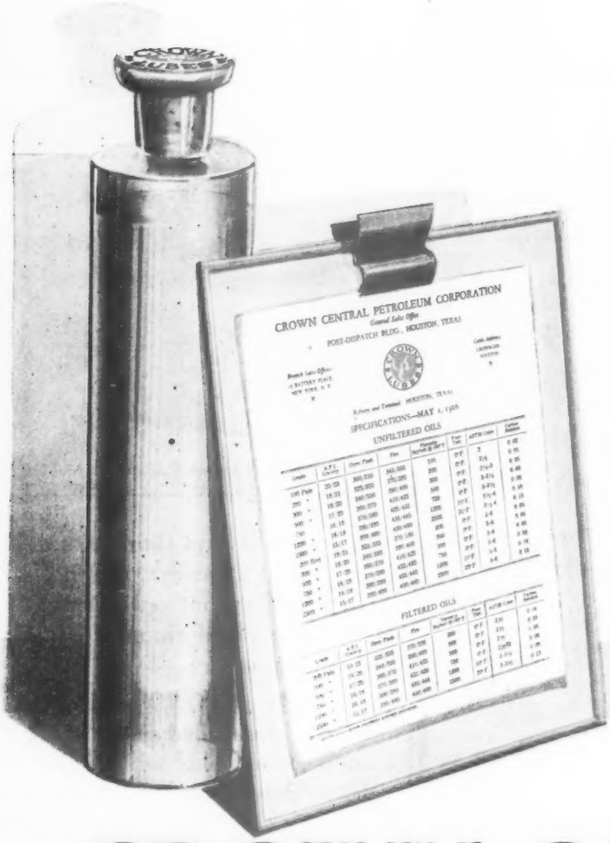

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BUREAU OF MINES STATISTICS FOR JULY, 1926

By G. R. Hopkins
Petroleum Economist, Bureau of Mines, Department of Commerce

ANALYSIS OF PETROLEUM SUPPLY AND DEMAND

(Barrels of 42 U. S. Gallons)

Supply—	May, 1926	June, 1926	July, 1926	July, 1925
Domestic crude production, light	51,422,000	51,065,000	53,174,000	52,138,000
Heavy	11,134,000	10,677,000	11,798,000	15,625,000
Imports, Crude	4,502,000	5,571,000	5,188,000	4,155,000
Refined	2,016,000	2,341,000	1,979,000	1,693,000
Total supply all oils	69,074,000	69,654,000	72,139,000	73,611,000
Daily average	2,228,000	2,322,000	2,327,000	2,375,000
Change in stocks all oils	*2,595,000	†4,186,000	‡5,126,000	1,081,000
Demand: Total demand	71,669,000	73,840,000	77,265,000	72,530,000
Daily average	2,312,000	2,461,000	2,492,000	2,334,000
†Exports: Crude	1,842,000	1,225,000	1,726,000	1,302,000
Refined	9,630,000	9,729,000	8,505,000	8,151,000
Domestic demand	60,197,000	62,886,000	67,034,000	63,077,000
Daily average	1,942,000	2,096,000	2,162,000	2,035,000
Excess of daily average domestic production over domestic demand	76,000	‡38,000	‡66,000	151,000
Stocks: (end of month) crude:				
East of California, light	224,786,000	222,092,000	221,300,000	308,231,000
Heavy	59,223,000	59,340,000	56,884,000	
California, light	37,179,000	35,405,000	33,583,000	43,411,000
§Heavy	88,180,000	87,389,000	87,761,000	72,388,000
Total crude	409,368,000	404,226,000	399,528,000	424,030,000
Total refined	118,673,000	119,629,000	119,201,000	123,807,000
Grand total liquid stocks	528,041,000	523,855,000	518,729,000	547,837,000

*Decreases.
†Includes shipments to non-contiguous territories.
‡Deficiency.
§Includes fuel oil.

PRODUCTION OF CRUDE PETROLEUM BY FIELDS AND STATES WITH SPECIFICATION BY GRAVITY

(Barrels of 42 U. S. gallons.)

Field—	June, 1926 Total	June, 1926 Daily Av.	July, 1926 Total	July, 1926 Daily Av.	Jan.-July, 1926	Jan.-July, 1925*
Appalachian	2,449,000	81,633	2,497,000	80,548	16,361,000	16,079,000
Lima-Indiana	195,000	6,500	185,000	5,968	1,223,000	1,277,000
Michigan	3,000	100	5,000	161	22,000	.....
Illinois-S. W. Ind.	718,000	23,933	737,000	23,774	4,918,000	9,984,000
Mid-Continent	34,310,000	1,143,653	35,960,000	1,159,994	231,030,000	248,393,000
Gulf Coast	2,536,000	84,533	3,489,000	112,548	19,386,000	15,989,000
Rocky Mountain	3,262,000	108,733	3,356,000	108,258	22,400,000	19,677,000
California	18,269,000	608,981	18,743,000	604,619	128,831,000	132,309,000
United States total	61,742,000	2,058,066	64,972,000	2,095,870	424,171,000	†442,415,000
State						
Arkansas	5,061,000	168,700	5,073,000	163,645	36,486,000	43,329,000
California	18,269,000	608,981	18,743,000	604,619	128,831,000	132,309,000
Colorado	252,000	8,400	296,000	9,548	1,506,000	503,000
Illinois	662,000	22,067	681,000	22,968	4,539,000	4,596,000
Indiana	76,000	2,333	69,000	2,225	460,000	504,000
Southwestern	56,000	1,866	56,000	1,806	379,000	388,000
Northeastern	14,000	467	13,000	419	81,000	116,000
Kansas	3,622,000	120,733	3,721,000	120,032	23,628,000	21,390,000
Kentucky	526,800	17,560	550,200	17,748	3,632,200	4,038,400
Louisiana	2,069,000	68,967	2,088,000	67,355	13,175,000	11,820,000
Gulf Coast	307,000	10,233	392,000	12,645	2,281,000	1,596,000
Rest of State	1,762,000	58,734	1,696,000	54,710	10,894,000	10,224,000
Michigan	3,000	100	5,000	161	22,000	.....
Montana	793,000	26,423	899,000	29,000	4,737,000	1,949,000
New Mexico	127,000	4,233	133,000	4,291	867,000	366,000
New York	160,000	5,333	174,000	5,613	1,101,000	954,000
Ohio	655,000	21,833	637,000	20,549	4,265,000	4,187,000
Central & East	474,000	15,800	465,000	15,000	3,123,000	3,026,000
Northwestern	181,000	6,033	172,000	5,549	1,142,000	1,161,000
Oklahoma	14,483,000	482,753	14,894,000	480,446	99,880,000	102,821,000
Osage County	2,109,000	70,300	2,190,000	70,645	14,266,000	17,064,000
Rest of State	12,374,000	412,453	12,704,000	409,801	85,614,000	85,757,000
Pennsylvania	771,000	25,700	784,000	25,290	5,064,000	4,664,000
Tennessee	4,200	140	2,800	90	25,800	7,600
Texas	11,611,000	387,033	13,673,000	441,064	77,247,000	88,722,000
Gulf Coast	2,229,000	74,300	3,097,000	99,903	17,105,000	17,493,000
Rest of State	9,382,000	312,733	10,576,000	341,161	60,142,000	71,229,000
West Virginia	513,000	17,100	521,000	16,807	3,415,000	3,389,000
Wyoming:	2,090,000	69,667	2,028,000	65,419	15,240,000	16,859,000
Salt Creek	1,439,000	47,967	1,361,000	43,903	10,906,000	12,236,000
Rest of State	651,000	21,700	667,000	21,516	4,334,000	4,623,000
Classification by Gravity (approx.)—						
Light crude	51,065,000	1,702,166	53,174,000	1,715,290	348,148	365,304,000
Heavy crude	10,677,000	355,900	11,798,000	380,580	76,023	77,111,000

*Final figures. †Includes Alaska.

STOCKS OF CRUDE PETROLEUM IN THE UNITED STATES

At refineries (and in coastwise transit thereto). Reported by location of storage:		June 30, 1926*	July 31, 1926	July 31, 1925†
East Coast: Domestic		8,544,000	8,258,000	8,601,000
Foreign		2,681,000	3,092,000	2,209,000
Appalachian		1,688,000	1,722,000	1,307,000
Indiana, Illinois, etc.		1,919,000	1,881,000	1,438,000
Oklahoma, Kansas, etc.		3,713,000	3,081,000	5,290,000
Texas: Inland		1,147,000	1,133,000	1,283,000
Gulf coast: Domestic		6,736,000	6,627,000	5,496,000
Foreign		407,000	416,000	663,000
Arkansas and Inland Louisiana		649,000	572,000	604,000
Louisiana, Gulf coast: Domestic		6,256,000	6,664,000	4,533,000
Foreign		1,464,000	1,089,000	1,421,000
Rocky Mountain		1,538,000	1,500,000	1,456,000
Total east of California		36,742,000	36,035,000	34,307,000
Elsewhere than at refineries:				
Domestic—Reported by field of origin:	Gross	7,222,000	7,269,000	7,127,000
Appalachian: New York, Pennsylvania, West Virginia, Eastern and Central Ohio	Net	6,928,000	6,984,000	6,874,000
	Gross	1,845,000	1,772,000	2,005,000
Kentucky	Net	1,740,000	1,667,000	1,902,000
	Gross	1,015,000	973,000	1,313,000
Lima-Indiana	Net	813,000	771,000	1,114,000
	Gross	12,334,000	12,212,000	11,379,000
Illinois-S. W. Indiana	Net	11,854,000	11,731,000	10,886,000
	Gross	148,563,000	148,288,000	174,529,000
Mid-Continent: Oklahoma, Kansas, Central, North and West Texas	Net	135,739,000	135,582,000	163,104,000
	Gross	42,501,000	40,969,000	41,688,000
Northern Louisiana and Arkansas	Net	40,238,000	38,544,000	39,603,000
Gulf Coast	Gross	16,959,000	16,398,000	21,406,000
	Net	16,558,000	16,006,000	20,951,000
Rocky Mountain	Gross	30,555,000	30,546,000	28,608,000
	Net	30,509,000	30,495,000	28,574,000
TOTAL—Pipeline and tank-farm stocks east of California	Gross	260,994,000	258,427,000	288,055,000
	Net	244,379,000	241,780,000	273,008,000
Foreign crude petroleum on Atlantic coast		58,000	70,000	173,000
Foreign crude petroleum on Gulf coast		253,000	299,000	743,000
TOTAL—Refinery, pipeline, and tank-farm stocks of domestic and foreign crude petroleum east of California		311,000	369,000	916,000
		281,432,000	278,184,000	308,231,000
Classification by Gravity (approx.)—				
East of California:				
Light crude (24° and above)		222,092,000	221,300,000	
Heavy crude (below 24°)		59,340,000	56,884,000	
California: Light		35,405	56,884,000	
Heavy (including fuel)		87,389,000	87,761,000	72,388,000

*Revised. †Final figures.

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IMPORTS AND EXPORTS OF CRUDE PETROLEUM (Barrels)
(From Bureau of Foreign & Domestic Commerce)

Field—	June, 1926 Total	June, 1926 Daily Av.	July, 1926 Total	July, 1926 Daily Av.	Jan.-July, 1926	Jan.-July, 1925*
Imports:	5,571,000	185,700	5,189,000	167,387	36,815,000	40,253,000
From Mexico	4,215,000	140,500	3,399,000	109,645	27,105,000	36,920,000
From Venezula	1,008,000	33,600	1,037,000	33,452	6,622,000	2,088,000
Other countries	348,000	11,600	753,000	24,290	3,088,000	1,245,000
Exports:	1,225,000	40,833	1,726,000	55,677	9,299,000	8,040,000
Domestic crude oil						
To Canada	1,067,000	35,567	1,537,000	49,580	7,619,000	4,927,000
Other countries	158,000	5,266	189,000	6,097	1,679,000	2,969,000
Foreign crude oil					1,000	144,000

*Final figures.
NOTE—Shipments to Alaska during July less than 500 barrels.

INDICATED DELIVERIES OF CRUDE PETROLEUM, EXCLUSIVE OF CALIFORNIA GRADES, TO DOMESTIC CONSUMERS (Barrels)
(Production plus imports exports plus stocks, exclusive of consumer's stocks, at beginning of month minus stocks at end of month.)

Domestic petroleum by field of origin:	June, 1926 Total	June, 1926 Daily Av.	July, 1926 Total	July, 1926 Daily Av.	Jan.-July, 1926	Jan.-July, 1925*
Domestic petroleum by field of origin:						
Appalachian	2,284,000	73,467	2,514,000	81,097	16,263,000	16,587,000
Lima-Indiana	233,000	7,766	227,000	7,322	1,423,000	1,386,000
Michigan	3,000	100	5,000	161	22,000	
Ill. & S. W. Ind.	903,000	30,100	860,000	27,742	3,769,000	4,974,000
Mid-Continent	38,172,000	1,272,400	37,811,000	1,219,710	252,845,000	257,305,000
Gulf Coast	2,311,000	77,033	4,041,000	130,355	22,643,000	18,311,000
Rocky Mountain	3,264,000	108,800	3,370,000	108,710	20,900,000	19,816,000
Deliveries and Exports	47,270,000	1,575,666	48,828,000	1,575,097	317,805,000	318,386,000
Deliveries	46,459,000	1,548,633	47,862,000	1,543,935	311,852,000	312,081,000
Foreign petroleum	5,634,000	187,800	5,131,000	165,516	36,852,000	39,927,000
Deliveries of domestic and foreign pet.	52,093,000	1,736,433	52,993,000	1,709,451	348,704,000	†352,008,000

*Final figures.
†Includes Alaska.

NUMBER OF PRODUCING OIL WELLS COMPLETED*

June, 1926	1,652
July, 1926	1,852
January-July, 1926	10,036
January-July, 1925†	9,711

*For states east of California, from The Oil and Gas Journal; for California, from the American Petroleum Institute.
†Final figures.

SHIPMENTS OF CALIFORNIA OIL THROUGH PANAMA CANAL TO EASTERN PORTS IN UNITED STATES
(From Panama Canal Record)

	June, 1926	July, 1926	Jan.-July, 1926	Jan.-July, 1925*
Crude oil: Long tons (2,240 lbs.)	195,000	120,000	1,175,000	1,356,000
Barrels (approx.)	1,407,000	862,000	8,452,000	9,763,000
Refined products: Barrels (approx.)	1,657,000	1,495,000	10,617,000	7,852,000
Fuel oil	542,000	458,000	2,621,000	64,000
Gas oil	355,000	394,000	2,795,000	361,000
Gasoline	692,000	643,000	4,599,000	5,962,000
Lubricants	68,000	.....	274,000	323,000
Tops	.....	.....	328,000	1,142,000

*Final figures.

COMPARATIVE ANALYSES OF MAJOR PRODUCTS, JULY, 1926, AND PRECEDING MONTHS
(Barrels of 42 U. S. gallons. Beginning with the August report, all figures for liquid products will be on the barrel basis.)

	Production	Imports*	Exports*	Stocks End of Period	Domestic Demand
Gasoline:					
May	24,509,000	621,000	4,529,000	42,907,000	23,568,000
June	24,238,000	464,000	3,744,000	40,792,000	23,073,000
July	24,927,000	460,000	3,702,000	38,315,000	24,162,000
January-July	163,426,000	3,307,000	26,230,000	38,315,000	141,063,000
Motor Fuel:					
May	.....	.....	.....	.....	.....
June	25,374,000	.....	.....	.....	.....
July	26,093,000	.....	.....	.....	.....
January-July	170,581,000	.....	.....	.....	.....
Kerosene:					
May	5,193,000	4,000	1,623,000	7,378,000	3,211,000
June	4,995,000	3,000	1,604,000	7,877,000	2,895,000
July	4,862,000	21,000	1,612,000	8,439,000	2,709,000
January-July	35,375,000	30,000	11,714,000	8,439,000	22,373,000
Lubricants:					
May	2,856,000	11,000	715,000	7,656,000	1,864,000
June	2,682,000	3,000	984,000	7,314,000	2,043,000
July	2,847,000	1,000	746,000	7,327,000	2,089,000
January-July	18,753,000	25,000	5,614,000	7,327,000	13,090,000
Wax (lbs.):					
May	56,050,000	213,000	23,968,000	149,396,000	18,983,000
June	50,672,000	812,000	27,211,000	155,254,000	18,415,000
July	54,267,000	2,091,000	30,768,000	156,704,000	24,178,000
January-July	368,388,000	5,516,000	196,282,000	156,704,000	137,309,000
Gas and fuel oils:					
May	30,321,000	1,368,000	2,737,000	†20,841,000	.....
June	29,236,000	1,856,000	3,370,000	†22,554,000	.....
July	31,351,000	1,480,000	2,427,000	†25,696,000	.....
January-July	205,763,000	9,248,000	21,156,000	†25,696,000	.....
July, 1925, for comparison:					
Gasoline	23,073,000	401,000	2,504,000	38,007,000	22,879,000
Kerosene	4,592,000	2,000	1,723,000	10,581,000	3,506,000
Lubricants	2,499,000	3,000	786,000	6,852,000	1,497,000
Wax (lbs.)	46,032,000	1,922,000	26,594,000	112,942,000	18,802,000
Gas and fuel oils	34,495,000	1,287,000	3,136,000	†27,821,000	.....

*From Bureau of Foreign & Domestic Commerce. Exports, except for wax, include shipments to Alaska, Hawaii and Porto Rico.
†These stocks for east of California only.

RUNS TO STILLS AND OUTPUT OF REFINERIES IN THE UNITED STATES, JULY, 1926

Oils run to stills (bbls.):	Crude Oil— Domestic	Crude Oil— Foreign	Unfinished Oils	Nat.-Gas Gasoline	Oils Run to Stills
East Coast	9,332,000	2,249,000	1,235,000	165,000	12,981,000
Appalachian	2,470,000	.....	82,000	24,000	2,576,000
Ind., Ill., etc.	6,632,000	.....	409,000	75,000	6,516,000
Okla., Kans., etc.	8,464,000	.....	262,000	346,000	9,072,000
Texas	12,895,000	305,000	388,000	316,000	13,904,000
Louisiana & Ark.	4,745,000	1,216,000	381,000	70,000	6,412,000
Rocky Mountain	2,542,000	.....	554,000	77,000	3,173,000
California	17,192,000	.....	360,000	279,000	17,831,000
Total U. S.	63,672,000	3,770,000	3,671,000	1,352,000	72,465,000
Daily aver., 7/26	2,054,000	121,600	118,400	43,600	2,337,600
Daily aver., 6/26	2,047,200	120,400	97,400	43,300	2,308,300
Texas Gulf Coast	9,851,000	305,000	340,000	254,000	10,750,000
La. Gulf Coast	3,119,000	1,216,000	187,000	6,000	4,528,000

Output and losses	Gasoline (Gals.)	Kerosene (Gals.)	Gas and Fuel Oils (Gals.)	Lubricants (Gals.)	Wax (Lbs.)
East Coast	167,506,000	36,879,000	223,619,000	39,183,000	22,458,000
Appalachian	40,672,000	13,982,000	25,568,000	17,076,000	8,461,000
Ind., Ill., etc.	149,204,000	16,472,000	73,336,000	10,958,000	6,661,000
Okla., Kans., etc.	184,590,000	27,927,000	128,583,000	8,785,000	3,843,000
Texas	213,550,000	57,244,000	224,677,000	30,100,000	4,853,000
Louisiana & Ark.	66,167,000	19,058,000	118,418,000	1,809,000	4,985,000
Rocky Mountain	56,617,000	7,243,000	27,661,000	2,467,000	3,006,000
California	168,630,000	25,410,000	494,886,000	9,198,000	.....
Total U. S.	1,046,936,000	204,215,000	1,316,748,000	119,576,000	54,267,000
Daily aver., 7/26	33,772,000	6,588,000	42,476,000	3,857,000	1,751,000
Daily aver., 6/26	33,933,000	6,993,000	40,931,000	3,755,000	1,689,000
Texas Gulf Coast	166,279,000	48,391,000	169,490,000	29,145,000	4,679,000
La. Gulf Coast	51,569,000	16,860,000	65,753,000	1,753,000	4,985,000

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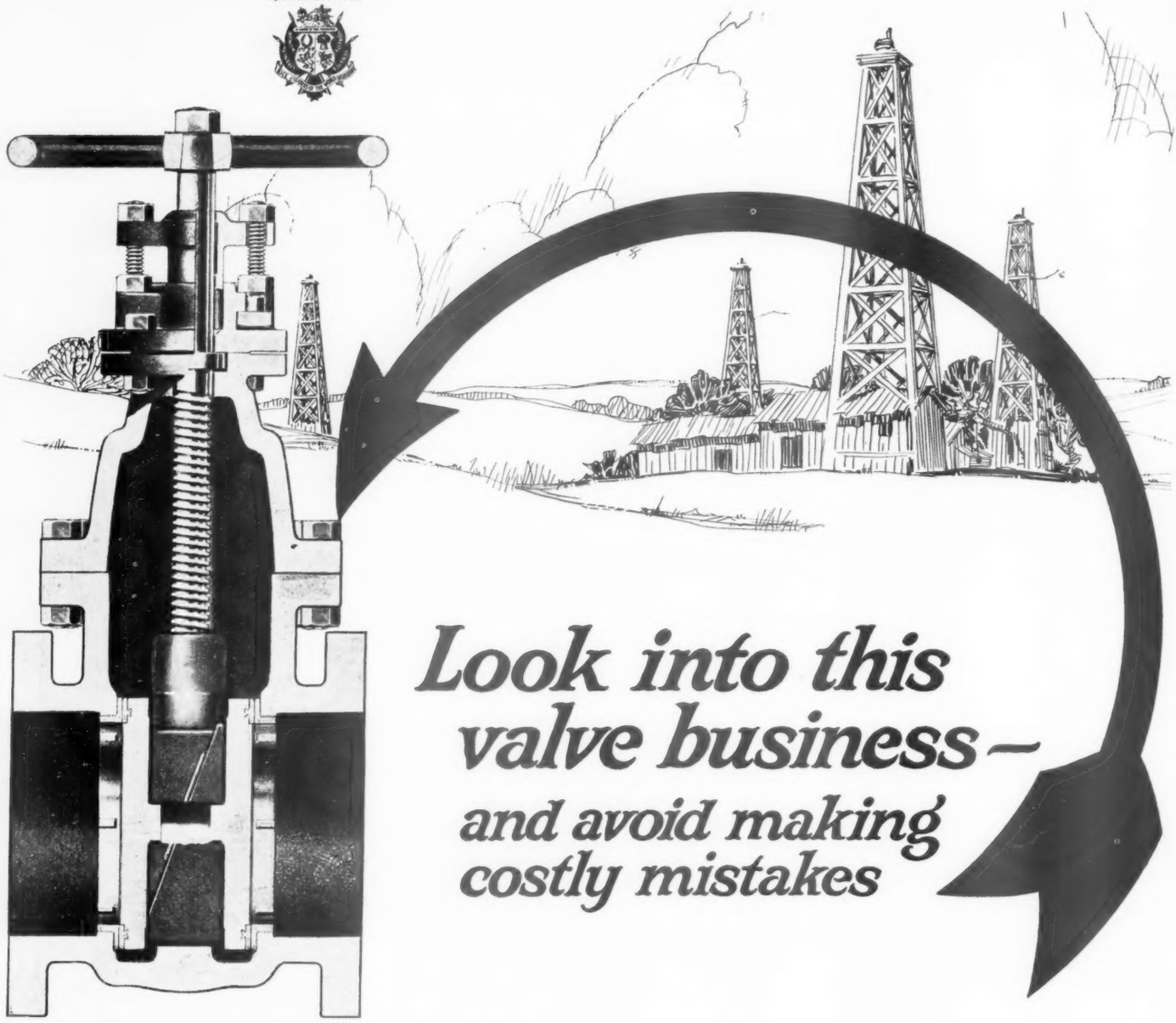

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Output and losses (cont.):	Coke (Tons)	Asphalt (Tons)	Other Fin. Prod. (Gals.)	Unfinished Prod. (Gals.)	Losses (Bbls.)
East Coast	16,180	128,244	7,356,000	3,530,000	593,000
Appalachian	1,736	.....	861,000	2,498,000	138,000
Ind., Ill., etc.	21,211	16,439	6,121,000	298,000	176,000
Okla., Kans., etc.	10,525	469	1,881,000	6,921,000	451,000
Texas	12,902	26,642	219,000	24,760,000	575,000
Louisiana & Ark.	12,042	59,753	6,815,000	34,015,000	146,000
Rocky Mountain	8,762	3,437	1,666,000	30,593,000	81,000
California	.....	46,267	8,694,000	*20,328,000	259,000
Total U. S.	83,358	281,196	33,613,000	122,943,000	2,419,000
Daily aver., 7/26	2,689	9,071	1,084,000	3,966,000	78,000
Daily aver., 6/26	2,711	10,032	1,098,000	3,807,000	77,000
Texas Gulf Coast	10,123	26,642	81,000	9,319,000	480,000
La. Gulf Coast	11,351	57,999	5,862,000	29,285,000	65,000

*Includes 102,000 bbls. net tops produced.

GASOLINE PRODUCTION BY THE VARIOUS METHODS—JULY, 1926
(Gallons)

	Straight Run	Pct.	Cracked	Pct.	Nat.-Gas Gasoline	Pct.	Total
East Coast	92,399,000	55	68,177,000	41	6,930,000	4	167,506,000
Appalachian	29,698,000	73	9,966,000	25	1,008,000	2	40,672,000
Indiana, Ill., etc.	82,730,000	56	63,324,000	42	3,150,000	2	149,204,000
Oklahoma, Kansas, etc.	115,906,000	63	54,152,000	29	14,532,000	8	184,590,000
Texas	117,049,000	55	83,229,000	39	13,272,000	6	213,550,000
Louisiana & Ark.	35,002,000	59	24,225,000	37	2,940,000	4	66,167,000
Rocky Mountain	28,588,000	50	24,795,000	44	3,234,000	6	56,617,000
California	156,114,000	93	798,000	..	11,718,000	7	168,630,000
Total U. S.	661,486,000	63	328,666,000	31	56,784,000	6	1,046,936,000
Total U. S. 6/26	654,037,000	64	309,433,000	31	54,516,000	5	1,017,986,000
Gulf Coasts	115,794,000	53	91,134,000	42	10,920,000	5	217,848,000

STOCKS HELD BY THE REFINING COMPANIES IN THE UNITED STATES JULY 31, 1926

	Gasoline (Gals.)	Kerosene (Gals.)	Gas and Fuel Oils (Gals.)	Lubricants (Gals.)
East Coast	345,755,000	74,423,000	268,882,000	105,578,000
Appalachian	32,535,000	10,064,000	27,708,000	38,284,000
Indiana, Ill., etc.	191,076,000	28,653,000	61,245,000	29,949,000
Oklahoma, Kans., etc.	122,954,000	15,426,000	206,605,000	16,802,000
Texas	169,024,000	73,921,000	333,311,000	70,101,000
Louisiana & Arkansas	147,156,000	63,557,000	124,185,000	3,956,000
Rocky Mountain	177,021,000	12,284,000	58,317,000	7,411,000
California	423,696,000	76,104,000	.....	35,658,000
Total U. S.	1,609,217,000	354,432,000	1,079,253,000	307,739,000
Total U. S. 6/30/26	1,713,274,000	330,818,000	947,268,000	307,210,000
Texas Gulf Coast	153,037,000	61,595,000	285,927,000	68,595,000
La. Gulf Coast	144,920,000	62,177,000	92,634,000	3,952,000

	Wax (Lbs.)	Coke (Tons)	Asphalt (Tons)	Other Fin. Prod. (Gals.)	Unfinished Oils (Bbls.)
East Coast	72,412,000	14,913	78,614	7,606,000	6,529,000
Appalachian	18,844,000	441	39	1,930,000	1,014,000
Indiana, Ill., etc.	27,558,000	29,454	20,398	10,965,000	3,091,000
Okla., Kans., etc.	5,628,000	28,019	1,507	2,775,000	2,396,000
Texas	9,464,000	70,229	7,370	296,000	8,354,000
Louisiana & Ark.	17,125,000	60,504	30,117	1,424,000	2,731,000
Rocky Mountain	5,529,000	66,167	8,808	1,021,000	1,850,000
California	144,000	.....	38,000	11,676,000	*12,562,000
Total U. S.	156,704,000	260,727	184,853	37,693,000	38,527,000
Total U. S. 6/30/26	155,254,000	246,707	200,881	42,436,000	40,081,000
Texas Gulf Coast	9,206,000	67,439	7,370	184,000	7,840,000
La. Gulf Coast	17,125,000	58,009	29,771	1,335,000	2,468,000

*Includes 4,664,000 bbls. tops in storage.

NATURAL-GAS GASOLINE, JULY, 1926

The production of raw natural-gas gasoline in the United States during July, 1926, amounted to 110,359,000 gallons, a daily average of 3,560,000 gallons, or 85,000 bbls. This represents a slight decrease in daily average production from the preceding month. A decrease in output was again recorded in the Appalachian states, but California registered another gain, and the production in the Oklahoma-Kansas district was maintained at its high level. Stocks of natural-gas gasoline at the plants July 31, 1926, amounted to 26,461,000 gallons, a decrease during the month of 846,000 gallons. Blending at the plants showed very little change during the month, but shipments to refineries increased and was probably the cause of the decline in stocks.

	Natural-Gas Production (Net)*	Gasoline Stocks End of Month	Blended Motor Fuel: Natural-Gas Gasoline Used in Blends	Blended Motor Fuel: Naphtha or Other Oils Used in Blends	Stocks End of Month
Appalachian	5,224,000	2,328,000	239,000	305,000	358,000
Indiana, Illinois, etc.	1,146,000	263,000	63,000	33,000	22,000
Oklahoma, Kansas, etc.	42,245,000	15,557,000	3,295,000	7,063,000	1,428,000
Texas	18,404,000	5,707,000	273,000	1,044,000	243,000
La. & Arkansas	6,537,000	1,106,000	48,000	201,000	401,000
Rocky Mountain	3,636,00	429,000	91,000	135,000	159,000
Total east of Calif.	77,192,000	25,390,000	4,009,000	8,781,000	2,621,000
California	33,167,000	1,071,000	Not available		26,000
Total U. S.	110,359,000	26,461,000	.....	.....	2,647,000
Daily average	3,560,000	.....	.....	.....	.....

*1 per cent estimated.

The indicated output of motor fuel in the United States from the above and other sources may be expressed by the following table:

(Gallons)	June	July
Total gasoline produced at refineries	1,018,900,000	1,046,900,000
(a) Includes natural-gas gasoline blended at refineries:		
June	54,500,000	
July	56,800,000	
(b) Includes natural-gas gasoline run through refinery pipelines:		
June	12,000,000	
July	12,100,000	
Gasoline production exclusive of (a) and (b)	951,500,000	978,000,000
Natural-gas gasoline produced at plants	107,000,000	110,400,000
Benzol production*	7,200,000	7,500,000
Total motor fuel produced	1,065,700,000	1,095,900,000
Daily average	35,520,000	35,350,000

*Estimated with production of by-product coke as a basis.

ASPHYXIATED IN CELLAR

AMARILLO Tex., Sept. 11.—After warnings were issued in the Gray County field, H. B. Hawks of Carlton, Ohio, and A. C. Underwood of Pennsborough were found asphyxiated in the cellar of a well on the Bayshore Petroleum Company's No. 1 Bradford test in Gray County. So acute is the danger from the heavy gas at night that drilling operations nearby have been suspended temporarily until the gasser can be controlled. Beside the danger of asphyxiation, there is danger of fire. Hydrogen sulphide is contained in virtually all Panhandle gas, and probably contributed to the tragedy, oil workers said.

APPROVE ASSIGNMENTS

OKLAHOMA CITY, Okla., Sept. 11.—The commissioners of the land office have approved assignments of leases to the State land as follows: Part of the northwest quarter of Section 16-21n-7e, Pawnee County, from W. A. Carson to the Barnsdall Oil Co., and the northeast quarter of Section 36-17n-3e, Payne County, from the Roxana Petroleum Corp. to the Marland Oil Co.

Six 150-ton Brine Coolers with wooden lagging. Exchangers are shown in the background.

A 900-ton Carbondale Absorption Machine installation at the Sinclair Refining Co., East Chicago, Ind.

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BOTH PARTIES SHOULD BE CLEARLY PROTECTED IN DRILLING CONTRACTS

By Lawrence Mills

The term drilling contract, in the phraseology of the oil man, three separate and distinct meanings. It is used to express the arrangement whereby one who acquires a lease, or a block of leases, agrees, as part or all of the consideration, to drill a well within a stipulated time upon the leased premises. It is also used to express the contract where one agrees to drill a well upon the lease of another and to receive, as part or full consideration therefor, an interest in the well and the lease. It is also used with reference to the agreement whereby a driller undertakes to drill a well for the lessee, for a money consideration, without acquiring any interest in the well or the lease. It is with the latter class of drilling contracts that this article proposes to deal.

While the drilling of wells is not peculiar to the oil business, drilling contracts have reached their highest development in connection with that industry, and have furnished a most important part of the litigation arising out of it. A drilling contract is governed by the law of contracts, generally, but certainly there is no more treacherous field for its operation than in connection with the drilling of wells for oil and gas. The stratum to be penetrated may be hard or soft. It may be subject to much caving. Water or gas may be encountered in several sands and must be dealt with. Casing may have to be pulled or underreamed. The material may be defective, or the workmanship careless. The dropping of a string of tools or the parting of casing, may mean a fishing job or a lost hole. Shortage of fuel or water may cause a shutdown and a claim for idle time. The hazard of wind and fire is always present.

Cannot Standardize the Form

From the the great variety of conditions under which the operations are carried on, there can be no standardized form of contract. In an old field where the sands and strata are well known and uniform, the contract can approach a standard, varying only in details. But in a wildcat territory, where all the conditions affecting the enterprise are unknown, the contract must be drawn to meet the conditions and circumstances in the particular case. It must look into the future and anticipate and provide for whatever contingency it may hold. One of the most frequent causes of disagreement is the failure of the parties really to agree upon all of the terms of their contract. They think they have had a thorough understanding until some unexpected condition arises, which is not covered in the contract, when, naturally enough, each tries to lay the responsibility upon the other.

The importance of a thorough agreement will be appreciated when it is considered that the contract, as written and signed, cannot be simplified or added to, by oral understandings or oil field customs or usages. When the parties have entered into a written contract, they are conclusively presumed to have embodied in it, the entire agreement, and the rights and obligations of each must be measured and determined by it, and it alone. However firmly established may be the custom, it does not become a part of the contract, unless expressly adopted. It is the almost universal practice, in both cable tool and rotary drilling, for the owner to furnish the rig, casing, fuel and water, and for the driller to furnish the balance of the tools and supplies, but if the contract failed to so provide, such custom could not be read into the agreement.

Should Embody All Terms

I have seen many drilling contracts that contained the barest skeleton of an agreement. All of the details were supplied, in the minds of the parties, by the usages and customs, with which they were both familiar and with reference to which they had contracted. They, no doubt, had a full and complete agreement, part of which was written and part implied, but the implied terms and conditions, which were in their minds, did not appear in the written instrument and, consequently, were not part of the contract. The written agreement should be so full and complete that a person, who is unfamiliar with the business and therefore ignorant of the customs and usages, could ascertain just what part each is to contribute to the enterprise and what responsibility he assumes.

Trade Terms May Be Used

While the written contract, if plain and unambiguous, may not be supplemented by custom or usage, this does not mean that the language of the instrument, if obscure or uncertain, may not be interpreted, or explained, by reference to such general customs. There is a natural tendency, in drawing such contracts, to use the terms and phraseology peculiar to the business. These terms, while often unintelligible to the outsider, have a clear and well-defined meaning in the industry. The meaning of such terms, appearing in the contract, may always be shown. Thus, where the contract provides for the payment to the driller of a flat sum per day for extra work, it may be shown what constitutes a day's work, whether 12 or 24 hours; what is meant by "reaming" or "drilling" or "the completion of a well." But, if the contract does not provide for extra payment for reaming, for instance, the custom of allowing it, cannot be proven.

Drilling Contract an Entirety

Another legal principle which further emphasizes the importance of a clear and definite agreement is that a drilling contract is an entirety; that is, it contemplates one thing, namely, a completed hole drilled, in accordance with the terms of the contract, to the stipulated depth. In order to authorize the driller to recover, upon the contract, he must show full performance. Ordinarily, unless performance is prevented by the faults of the owner, he is entitled to the whole contract price, or to nothing. The analogy between building contracts and drilling contracts is very close, but there is this fundamental difference. The work done in the erection of a building, although it is not completed, is not lost. Unless the foundation is so defective that it will not support the superstructure, the building can be finished, either by the owner or other contractors. For that reason, it is customary to insert in building contracts a provision that in case the work is not completed, it may be finished by the owner and the cost deducted from the contract price, the balance being paid to the first contractor. And even in the absence of such provision, there is a strong tendency, upon the part of the courts, to allow to the defaulting contractor the amount that his labor has contributed to the performance of the work, upon the principle of quantum meruit, which literally means the amount he has earned.

No Value Without Completion

But the case of drilling contracts is different. A hole drilled to a point 10 feet above the sand, which cannot be carried further, has no value whatever, either to the contractor, or to the owner; it is a total loss. The difficulty and hazard of the enterprise increase with the depth. For that reason, even when the hole is in good shape, something may happen to ruin it before the contract depth is reached. Accordingly, the courts, under ordinary circumstances, refuse to apply the principle of quantum meruit to drilling contracts, and deny to the contractor the right to recover for the part of the contract actually performed. They reason that the owner contracted for a completed hole to the contract depth, and should not be required to pay for a part performance, where there is no assurance that it will be completed.

Protecting the Owner

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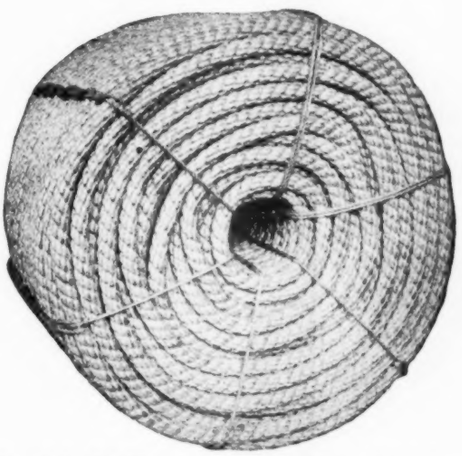

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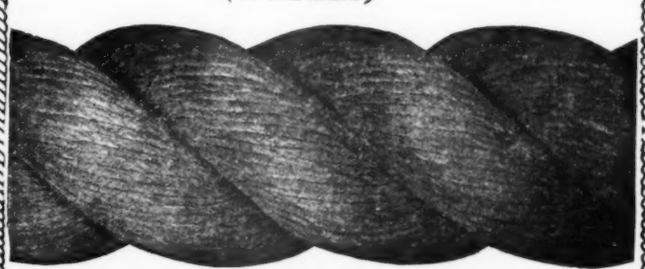

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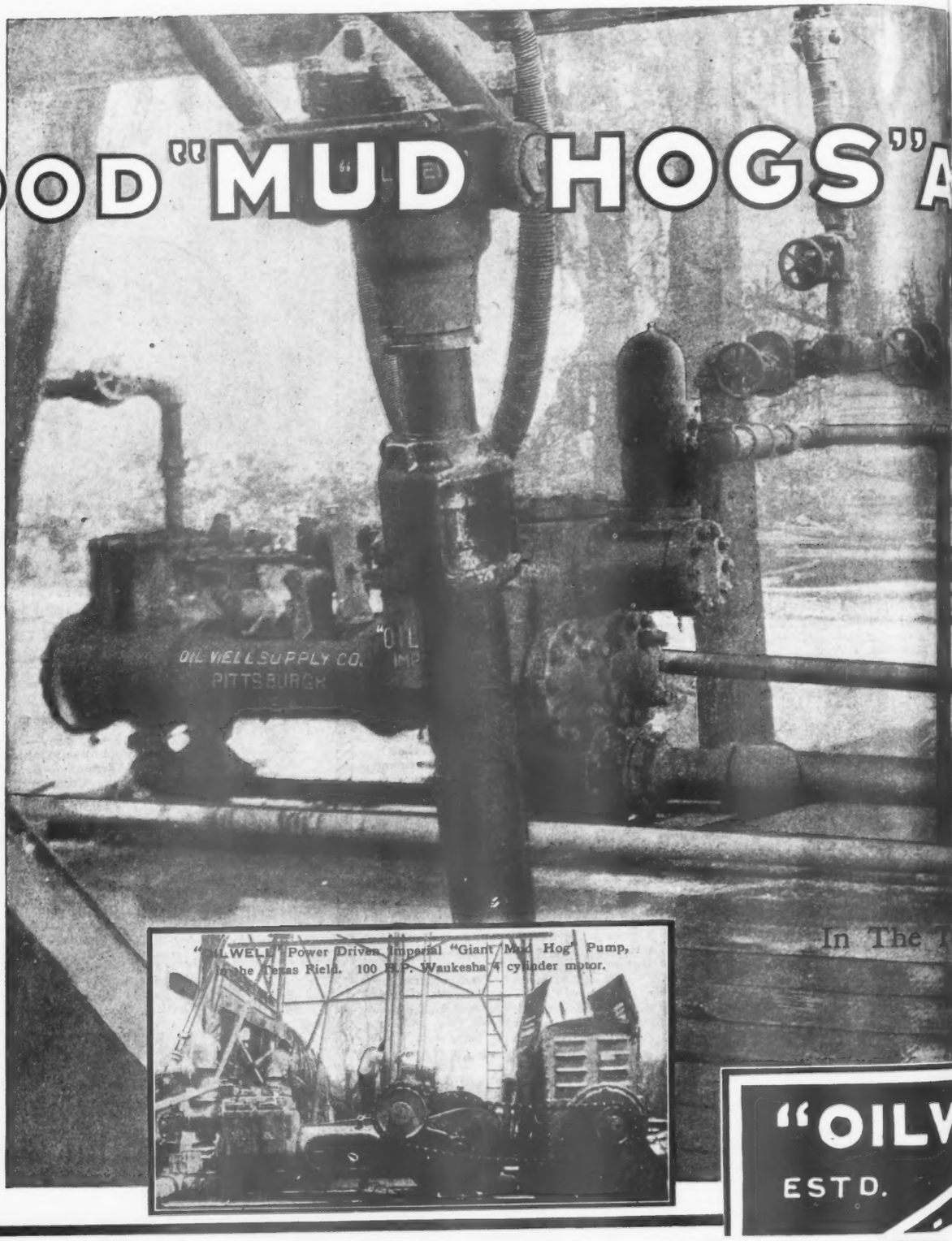

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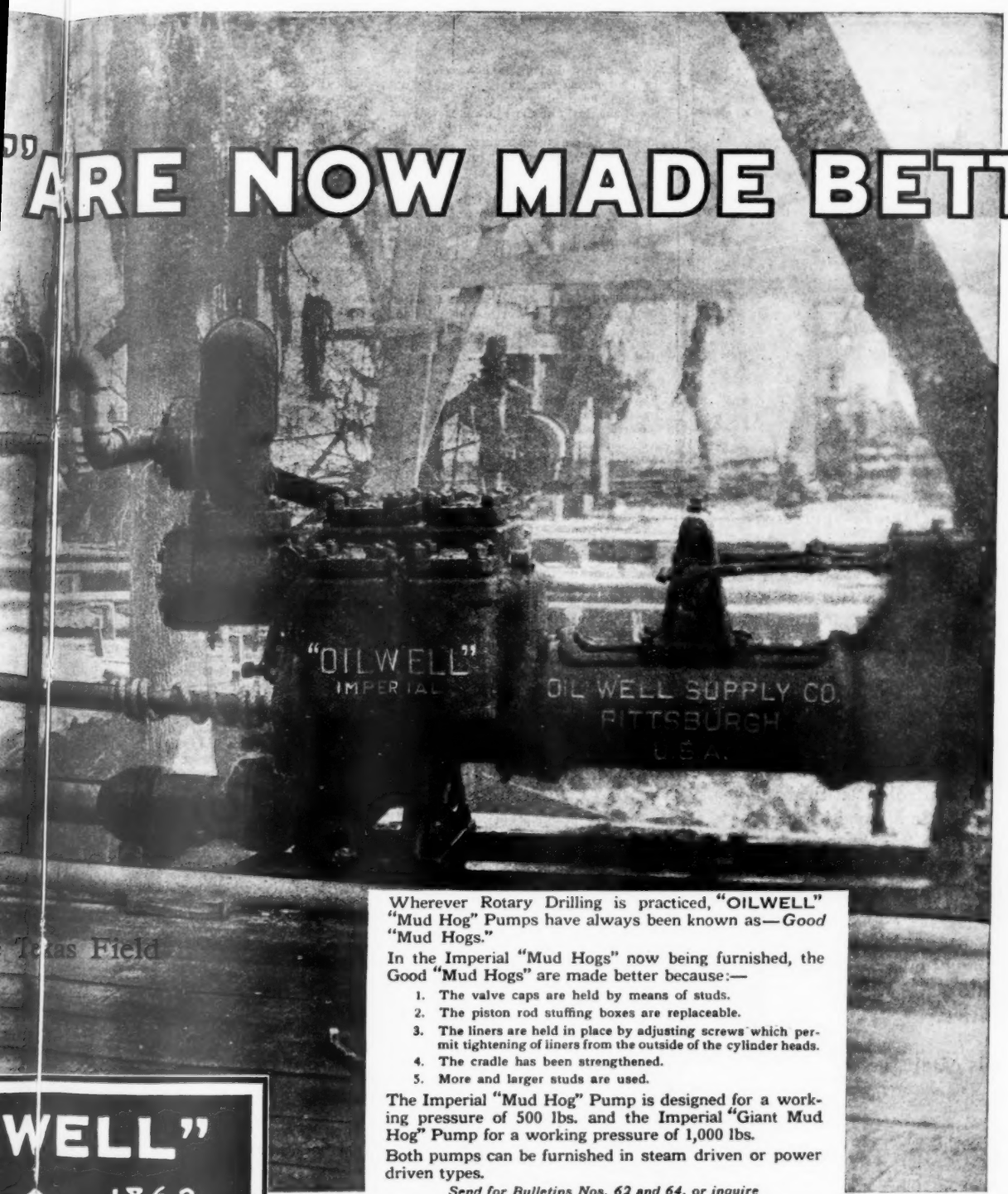

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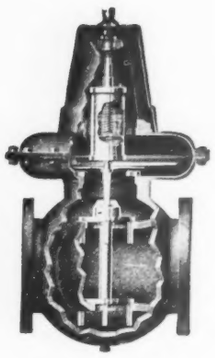

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performance by the impossibilty of completing the well, where such condition was not due to the act of the owner. Nor is he excused by reason of unexpected, or unforeseen difficulties, or accidents, or by his personal insolvency, or by the act of God, or a stranger to the contract. Even the death of the contractor will not ordinarily authorize a recovery, in the absence of full performance. Not only is the driller not entitled to any part of the contract price, where he has failed to complete the well, but he is liable for installments of the contract price that have been advanced to him from time to time. Whether the contractor would have the right to drill another well, in fulfillment of his contract, where the first was lost, is an open question. Certainly, he couldn't ask the owner to skid the rig and furnish the casing, fuel and water, at his own expense, for another attempt.

Protecting the Contractor

Of course, if the failure to complete the contract is due to the fault of the owner, the driller is excused from complete performance and may sue him for the part earned and the anticipated profit on the balance. Any act of the owner which prevents the driller from completing the well is a waiver of the condition of full performance. Nor is it necessary that the driller be forcibly prevented from completing it. An unequivocable notice to stop, or the taking over of the completion, himself, is sufficient. No matter in what difficulties the driller may have become involved, unless the contract expressly authorizes it, the owner is not justified in discharging the driller and taking over the work before abandonment by the contractor. He has no right to assume that the driller cannot complete the well, and if he does take it over, it will be presumed that the driller could have performed his contract, except for the interference of the owner.

Full performance of the contract may also be excused, in the absence of any active interference by the owner. When the owner has agreed to furnish certain essentials and fails to do so, the driller is under no obligation to supply them himself, but may treat such failure as a breach of the contract, which will relieve him from performance. Such instances would be a failure to furnish the rig, casing, fuel or water. The supplying of defective casing which caused the loss of the well, would clearly be a breach of the duty of the owner. Whether the failure of the owner to make payment of installments of the contract price, when due, is such a material breach as to justify the driller in abandoning contract, is a mooted question. Some of the courts hold that it is, while others take the opposite view. Litigation affecting the owner's title to the lease may justify the contractor in suspending operations, especially if he is stopped by injunction, or other court process. The owner may, of course, accept the job as complete, in which event, the contractor becomes entitled to the contract price, less, perhaps, deductions for the particulars wherein it was not completed.

Good Faith of the Driller

There is one further condition to the performance of the contract by the driller before he is entitled to the contract price. The purpose sought to be accomplished by the owner in entering into a drilling contract is the discovery and production of oil or gas; the drilling of the well is only the means to that end. The well itself, considered merely a hole in the ground, is of no value to any one. Consequently, good faith and reasonable skill in discovering and protecting the sands are elements of performance implied in the contract.

In proven territory, the sands to be encountered and their approximate depths are usually well known. In such cases, the contractor is required only to drill into the sands in such manner that any deposits they may carry may be utilized. In wildcat wells, however, the purpose of the contract is largely exploratory. Whether there are producing sands, and if so at what depths and of what thickness, is unknown. It is to find an answer to these questions, that the lessee has undertaken to drill the well, and to accomplish his purpose he is, to a large extent, dependent upon the skill and good faith of the driller. The driller, under such circumstances, especially if the well is being drilled with rotary tools, who highballs down, without looking back, as the expression is, intent only on reaching the contract depth, has kept the letter, but violated the spirit of his contract. The drilling of the well has been of no benefit to the owner; in fact, it may have resulted in serious injury to him, in that it has condemned what may be very valuable holdings.

Should Be Covered in Contract

The matter of discovering and testing sands should be covered by the express provisions of the contract, but in the absence of such express agreement, the duty would be clearly implied, and a failure to comply with it, a breach of the contract. But, while there is sometime an express, and always an implied, covenant for good faith and reasonable skill, in conducting the operations, there is no implied warranty that the well will produce oil or gas.

It is obvious that the differentiation of the operation which contemplates the drilling of a hole to the designated depth, from an enterprise for the discovery and production of oil or gas, prosecuted to the stipulated depth, is the very heart of the drilling contract. And it is in this particular that the average contract is most obscure and incomplete, especially with respect to wildcat tests. When the formation is known, the number of strings of pipe that it will be necessary to set, and their size, can be easily ascertained, as well as the points where they should be seated. But when the well is to be drilled in wildcat territory the driller has no way of determining the conditions which he will be called upon to meet and overcome, before he shall have pushed the exploration to the contract depth. If he is drilling with cable tools, he may encounter many salt sands, which will necessitate casing off, or underreaming, if the well is to be drilled dry. But each time he sets casing, he reduces the size of the hole and increases the difficulty and hazard of completing it. If the drilling is being done by rotary, the casing set for testing a sand can rarely be pulled and the contractor must continue the drilling inside the pipe. In either case, it is easy to conceive of a situation where the hole might be so reduced as to render impossible the completion of the well. But, if the owner was acting within his rights, under the contract, in setting the several strings of casing, it is probable that the contractor would be without a remedy and forced to abandon a well, short of completion, which had cost him many thousands of dollars.

Fair to Both Sides

The contract should be so drawn as not to work a hardship upon the driller who desires conscientiously to carry out the purpose and intent of the agreement, by making a thorough test, as well as to protect the owner against drilling merely for the purpose of making hole. The contractor cannot be expected, at his own expense, to double drill the hole. When unusual care and special precautions are necessary, they should be exercised, at the instance and expense of the owner. If he has reason to believe that the test is approaching a sand, he should have the right to demand the reduction of the size of the bit so as to leave a seat for the casing and the coring of the formation. But the expense of the reaming and the taking of the cores, above an agreed maximum, should be borne by the owner. If the reduction of the size of the hole, or other proceedings of the owner, unduly jeopardizes the completion of the well, he should assume the hazard.

In short, the purpose of the contract is to provide for the drilling of a well, which shall thoroughly test the capacity of the land for the production of oil or gas, down to the depth specified, without placing upon either party any greater risk, or expense, than he has agreed to assume. As before stated, the first prerequisite to a good contract, is a full understanding, not only upon the obvious and customary points, but upon all ques-

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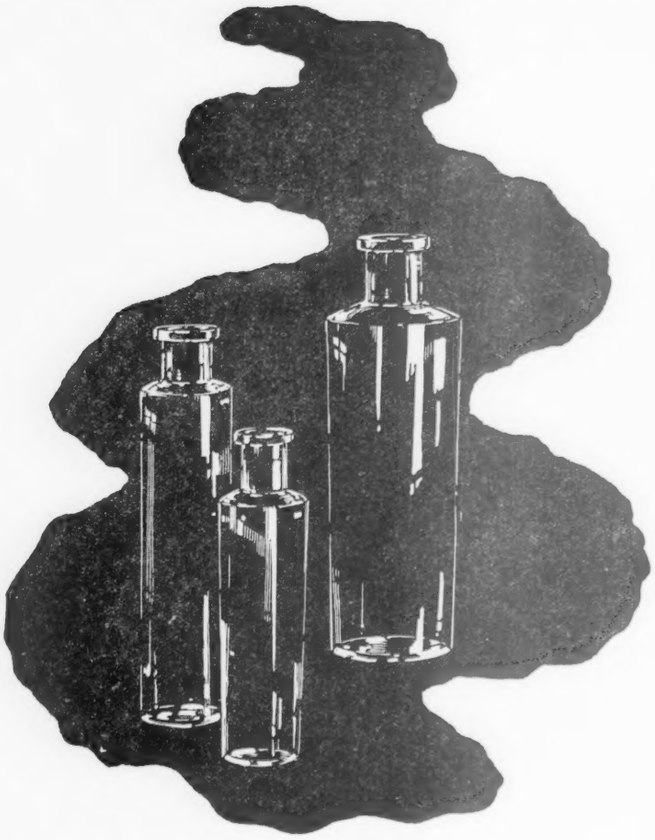


Made As Carefully As Perfume Bottles

OUR sample oil bottles are made by the same men, of the same material and in the same plant where our fancy hand-blown perfume bottles are produced.

Sample oil bottles, like perfume bottles, are more than mere containers. They are salesmen. They must add attractiveness to your product and they must provide a perfect medium for accurate inspection of your sample.

Clear flint glass, handsome squared shoulders and ground or polished bottoms, as desired, give to our sample oil bottles those qualities that mean added sales for users. Available in 2, 4 and 8-ounce sizes.

Illinois Glass Company · · · Alton Ill.
ESTABLISHED 1873

tions that might arise during the prosecution of the work. The next essential is that the terms agreed upon be embodied in the written contract that is signed, for all oral agreements and understandings are thereby superseded and excluded.

As a matter of actual practice, the interests of the owner are usually better protected, under such contracts, than those of the contractor. The operator, especially among the larger ones, is nearly always represented, in the drafting of the contract, by skilled counsel, whose duty it is to protect him. The driller, on the other hand, is usually unrepresented because he feels he cannot afford the expense and there is no organization, among drilling contractors that can furnish him, at moderate cost, the same class of legal services that is available to the other party to the contract. The business is, no doubt, highly competitive, but the remarkable fact remains that drilling contractors probably represent the greatest aggregate of capital engaged in any line of work, who have no organization of any kind for their mutual advantage.

TEST BELOW 2,800 FEET IN SOUTHERN NEBRASKA

Dr. G. R. Woods and others, who are drilling a community test near the town of Campbell, in the northeastern part of Franklin County, Nebraska, were last reported to be below 2,800 feet, after a fishing job of a week's duration. This well had a showing of oil at 2,600 feet. This test is due north of the Russell County, Kansas, Field.

F. E. Gilbreath, of Luray, Kans., and Beaver City parties will drill a test 10 miles west of Beaver City, Furnass County, Nebraska. It is located in the northwest quarter of the southwest quarter of Section 13 2-22. It is reported that it will be drilled to 3,250 feet if necessary. Contract had been let and the rig was up at last report. The test is 10 miles west of Stamford, where a test was drilled.

A correspondent of the Inland Oil Index, writing from Beaver City, says:

"The Stamford Oil Co., which has been conducting a series of core drilling tests on land leased by them, have about completed the work. They started core drilling in January, the first test being in the village of Stamford a few rods from the seep well that has pumped oil for months. They have made tests over a wide territory, crossing the Kansas line for a time or two, and making tests adjacent to and in some cases overlapping the territory included in the block which is being drilled by Beaver City interests. The twenty-ninth test was completed this week and officials of the company say they will drill but two more holes. They are very optimistic over the finding which the core drilling has revealed and expect to finance a deep test at once."

The same correspondent says that according to Nebraska state records there have been 39 unsuccessful tests for oil made in Nebraska thus far.

SEEKS UNIFORM OIL LAWS

Suggestions for uniform state laws for the conservation of oil resources and enlarged powers for state officials to govern production have been presented to the Federal Oil Conservation Board by Donald E. Bridgman of Minnesota, Commission of Uniform State Laws and investigator for the National Conference of Commissioners on uniform state laws on oil and gas development legislation.

Mr. Bridgman has pointed out that a uniform law regulating oil production would be constitutional. Under it, he told the board, oil discoveries in new fields could be developed by trustees or by corporations formed for the benefit of all land owners, to whom net proceeds would be paid after development costs had been met. Special rewards would be set aside for oil discoverers to encourage prospecting. He has held that prices would not be unduly raised as competition between the various fields would stimulate production in a normal manner.

Hundreds of millions would be saved through increased production and lessened costs, it is contended, and the proved reserves would be increased from seven to twenty years, averting a possible gasoline shortage.

COMPARATIVE COSTS

LOS ANGELES, Calif., Sept. 11.—The Union Oil Co. in its current advertising campaign carries some interesting facts about the cost of oil production and also some enlightening figures on the present sales price of gasoline as compared with other commodities. It is pointed out that the increase in the price of gasoline in 1925 over the 1913 price was only 7 per cent, while food cost 67 per cent, housing 78 per cent, clothing 76 per cent and heat and light 70 per cent more than in 1913. In addition the demand for gasoline has tremendously increased due to the fact that there are now more than eight times as many automobiles in use as there were in 1913.

PLAINS PIPE LINE

AUSTIN, Tex., Sept. 11.—The dif-to oil corporation chartered include: The Plains Pipe Line Co, Wichita Falls, increased capital stock from $100,000 to $300,000.

MAY STORE CRUDE IN NATURAL CANYONS OF HUTCHINSON COUNTY

AUSTIN, Tex., Sept. 4.—The difficult question where to put the oil from wells in the Texas Panhandle Field, a question acute because of the congestion of freight lines and pipelines, was solved by the Texas Railroad Commission when it authorized the storing of the oil in the natural canyons in Hutchinson County. A permit was granted to Heywood & Phillips to use the canyons for the storage of crude oil on the H. E. Smith lease in Section 14. A 10,000 bbl. well, shot a week ago, was shut down because no storage was available then. The permit to Heywood & Phillips requires a cushion of water on the bottom of the canyon under the oil, the walls of the canyon coated with cement, and provision made to cover the earthen storage with lumber and tarpaper. Steam lines run underneath the roof will be required to keep in readiness in case of fire.

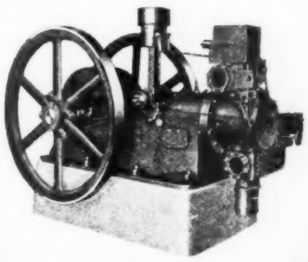
The action of the Railroad Commission follows a visit of the chief supervisor, H. E. Bell, to study the conditions in the field for several days. He reports that he is convinced the operators will continue to drill in their wells and that the production in the field will continue to increase.

"The pipelines and steel storage will not be sufficient to take care of the production," Judge Bell said. "The shutting in of some wells while others flow into the pipeline or steel storage will work a great injustice. Open storage of this high gravity oil is very objectionable. The chief supervisor states that he sees no other remedy than to permit properly constructed covered earthen storage during strict supervision of the Railroad Commission. This will enable those not having pipeline facilities or steel storage to protect their leases against offset wells and to take care of their own oil until there is an increase in pipeline capacities and railroad facilities in this section."

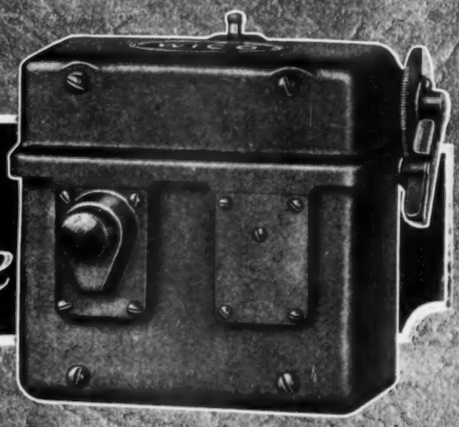
WICO

THE Successful Performance of WICO over a period of 12 years on the Joseph Reid Two-Cycle Engines, led to its adoption as Standard Equipment on the new Joseph Reid Four-Cycle Engine—

Testifying to WICO'S Superiority



The Ignition of Unvarying Performance



WICO ELECTRIC CO. SPRINGFIELD, MASS

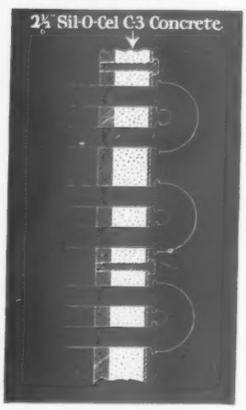
SIL-O-CEL
HEAT INSULATION

SIL-O-CEL insulation respects no structural limitations.

Any hot surface that wastes heat to the atmosphere can be effectively insulated with one or another form of this material. It makes no difference whether this surface be brick, steel or concrete. Projecting rivet heads or piping connections offer no serious handicap. The only requirement is the space itself that will be occupied by the insulating material.

Insulation of Tube Plates in Cracking Coil Furnaces

The insulation of cracking coil tube plates, for example, is simplified by the use of Sil-O-Cel C-3 insulating concrete as illustrated in the drawing reproduced at the right.



Molded On the Job

This form of Sil-O-Cel insulation, made by mixing granular calcined "C-3" material with small quantities of Portland cement, can be cast in any desired form, right on the job.

Within twenty-four hours it sets to a firm, coherent mass, which, after drying, forms an effective barrier to heat penetration that will withstand direct temperatures as high as 1800° F.

There are a dozen other places in refineries and gasoline plants where Sil-O-Cel "C-3" material effectively solves the insulation problem.

For Furnace Bases, Doors and Dampers

In the bases of stills, topping units, boilers and furnaces Sil-O-Cel C-3 is installed either as a dry filler or as insulating concrete between the fire brick and the Portland cement concrete to form an effective seal against heat radiation losses into the ground.

It is used to make light weight furnace doors that are five times as effective at stopping heat radiation as cumbersome doors of fire brick construction. Its durability and light weight also earn it wide favor for the construction of dampers in flues and hot gas mains.

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CHAIRMAN OF ANGLO PERSIAN CO. REVIEWS WORLD OIL SITUATION

By Sir Charles Greenway, Bart.
Chairman of the Anglo-Persian Oil Co., Ltd.

When the late Marquess Curzon declared at the close of the great war that the Allies had floated to victory on a wave of oil, he indicated truly the importance of this comparatively new source of power, and it is significant that, within so short a time, this country should have been saved by the same agency from a domestic danger which, while less serious than the menace of war, had, none the less, possibilities of a disastrous nature involving the well-being of the entire community. The general strike has taught several lessons, not only to this county, but to the world at large, and one which stands out clearly is the vital importance of oil in our economic life.

In the light of past experience, any attempt to estimate the possible oil reserves of the world is at the best only guesswork for the reason that very large areas of the earth's surface have so far received but the scantiest attention from the oil prospector. How impossible it is to make any accurate forecast has been demonstrated time and time again in the United States. America has the most highly developed oil industry of the world, supplying annually some 70 per cent of the world's oil supplies. Operations there are carried on in a well-settled country by many thousands of specialists and with abundance of geological and statistical information ready to hand furnished by the American Government. Yet with all the data available from such sources, estimates of the greatest variance have been and are still being made.

It is evident that, if so great uncertainty exists in a country like the United States, with its highly developed oil industry, estimates for undeveloped countries must be very far astray, as these are necessarily based on even much more uncertain data. While geological exploration is of very great value to the oil exploiter, and, indeed, no oil company would seriously undertake development work without making use of all available geological data, it is an axiom in the oil industry that the only real test of the value of an oil field is the drill. Many oil fields of outstanding importance have owed their discovery to mere chance, and the so-called "wildcatter" still contributes his quota of valuable wells each year to the world's known oil sources. On the other hand, fields very promising from a geological point of view have often proved of little value.

New Discoveries Probable

Great areas of the earth's surface still await the patient examination of the oil geologist, and the record of every great oil company operating today proves the importance of such search. It is my belief that, qute apart from developments in oil fields already producing, there will be many notable discoveries made in areas which, at present, do not come into the purview of the oil statistician. My considered conclusion, therefore, is that not for many years will information regarding the oil resources of the world be so complete as to make possible any accurate forecast of the total of the world's oil supplies.

While world production has been steadily mounting, it is noteworthy that the ratio of that of the United States to the total has shown a marked increase within recent years, rising from 59.7 per cent of the total in 1921 to 71.9 per cent in 1923, and continuing at only slightly below this highest figure for the two ensuing years. This fact has caused disquietude among many oil statisticians in the United States, and has led the American Government to institute an inquiry into the country's oil industry.

U. S. Peak Not Reached

What the practical outcome of that inquiry will be remains to be seen, but it has long been evident that some concerted action by Americans is necessary to prevent the uneconomic production of oil which has been such a feature of the industry in the United States. It is however, possible that, so far as the United States is concerned, the peak of production has not yet been reached, and past experience all points to the probability of many new and prolific areas being brought under production in that country, or of older fields gaining a new lease of life through deeper drilling.

Moreover, when the supplies of natural petroleum begin to diminish there are, in the American Contient (as well as in many other parts of the world) vast deposits of shale, hitherto practically untouched, from which enormous quantities of oil can be produced whenever the prices ruling for its products permit of their remunerative working. Similarly, in the coal deposits of America and elsewhere, there are enormous reserves of oil which can be made available whenever any shortage of petroleum raises prices sufficiently to render the treatment of coal for its oil products by low-temperature carbonization a profitable process.

Mexico's Handicaps Temporary

There is a tendency to regard Mexico as a definitely declining source of oil, but this opinion is based mainly on the poorer results obtained there during the past few years, and does not sufficiently consider the handicaps which the industry has suffered through the low prices for crude oil which ruled for some time in Meixco and from Government interference. A wiser policy would have given more encouragement to the large oil enterprises in Mexico to carry out much more extensive exploration work than they have done in the past few years, and it is not improbable that enlightened self-interest will induce the Mexican Government at some future date to encourage once more the more active employment of foreign capital in the development of new production in areas at present barely tested. It has been announced that more intensive drilling will be carried out in Mexico during the present year, and the results obtained from this should be valuable as an indication of Mexico's future potentialities. There is one other factor to be considered in relation to Mexico, and that is the increasing production from near-by South American countries such as Venezuela and Colombia. With oil more readily obtainable and of better quality from these countries the great enterprises which have interests on both sides of the Gulf will naturally at this stage concentrate on the newer areas, so that the untapped fields of Mexico may remain a potential reserve to be again exploited intensively when economic factors make it more desirable than at present.

Venezuelan Developments

South America has been looked upon as the great reserve source of oil in the Western Hemisphere, and developments within the past four years, particularly in Venezuela, already indicate the important place the Latin-American countries seem destined to take among world sources of petroleum.

The increase of Venezuelan oil production by more than 100 per cent in 1925 over the previous year—the total production of the country last year was 20,200,000 bbls.—placed Venezuela in the sixth place, or ahead of Rumania, in the list of world producers. The oil industry of Venezuela is very largely in the hands of responsible oil enterprises—a fortunte circumstance for the country, as, with adequate capital resources and a wealth of technical knowledge at their disposal, these companies are in a position to develop the country's oil deposits along the most modern, and therefore, most economic, lines. Present production is practically confined to the Lake Maracaibo area, but there is every reason to believe that the interior of Venezuela

WONDER WELL of the WORLD!

8033 ft. deep* and drilled throughout with ~~STANDARD~~ Seamless Drill Pipe

[*August 27, 1926]

PERHAPS it is only natural, after the performance ~~STANDARD~~ Seamless Drill Pipe, Casing and Tubing rendered in the Miley Oil Company's famous Athens No. 6, that ~~STANDARD~~ Seamless Drill Pipe should be used in drilling Olinda No. 96 — the well to pass the Miley mark of 7591 feet

Today, this astounding well — owned and being drilled by the Chanslor-Canfield Midway Oil Company, in the vicinity of Los Angeles — is 8033 feet deep and still drilling (Aug. 27.) Electricity furnishes the motive power.

As an engineering feat of its kind, it has no equal. As a thorough test of the possibilities of drilling machinery, it is invaluable. As a means of developing further geological knowledge, it will do immeasurable good. Much credit is due the "C. C. M. O."

All of which is *conclusive* evidence that progressive operators recognize the value of the additional safety factor of seamless pipe. To ~~STANDARD~~-ize your wells is to "play safe." Investigate this *proven* product today! Our informative and interesting folders forwarded on request.

"Hats off"—to these men!

TOP ROW, left to right M. J. Foster, Ray Walters, W. R. Bropher, R. L. Seals, O. F. Colwell, C. G. Etchison, and J. Carney MIDDLE ROW: Paul Vanatta, M. J. Turley, R. W. Bennett, H. E. Bradley, driller; A. E. Spear, driller; G. E. Norton, driller. LOWER ROW: W. W. Bird, V. B. Kimmel, H. R. Williams, Transportation Foreman; Geo. E. Ruggels, Drilling Foreman; N. W. Wickersham, Engineer; J. T. Harryman, Supt.

Only superior drill pipe could stand such a test. It reflects our care in manufacture.

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STANDARD

Seamless DRILL PIPE · TUBING · CASING

This is No. 19 of a series on specifications—keep for reference in ordering.

BARSCO PRODUCTS

for Oil and Gas Well Drilling

—here's a stronger and more rigid Gas Packing Clamp—

Here's another proof that BARSCO products are built better—*two extra strong bolts* (instead of the usual one) *at either end*—greater rigidity, therefore longer life.

Specifications on Gas Packing Clamps with Gas Outlet

Size, Inches	Size Gas Outlet	Weight, Pounds
6¼x 4½	1½ or 2	120
6⅝x 4½	1½ or 2	130
6⅝x 5⅞	1½ or 2	120
7⅝x 5⅝	1½ or 2	150
8¼x 5⅞	1½ or 2	160
8¼x 5⅞	2½ or 3	155
8¼x 6¼	1½ or 2	160
8¼x 6¼	2½ or 3	180
8¼x 6⅝	1½ or 2	155
8¼x 6⅝	2½ or 3	190
9⅝x 7⅝	1½ or 2	195
9⅝x 7⅝	2½ or 3	240
10 x 6⅝	1½ or 2	230
10 x 6⅝	2½ or 3	290
10 x 8¼	1½ or 2	200
10 x 8¼	2½ or 3	250
11⅝x 9⅝	1½ or 2	245
11⅝x 9⅝	2½ or 3	320
12½x 8¼	1½ or 2	310
12½x 8¼	2½ or 3	390
12½x10	1½ or 2	250
12½x10	2½ or 3	330
13½x12½	1½ or 2	300
13½x12½	2½ or 3	380
15½x12½	1½ or 2	370
15½x12½	2½ or 3	465
15½x13½	1½ or 2	350
15½x13½	2½ or 3	440

BARSCO also builds Gas Packing Clamps —regular pattern, without gas outlets.

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—Write for Complete Catalog

will prove a valuable source of petroleum when it is decided to extend operations southwards.

Although at present some distance down the list of oil-producing countries, one may look to Colombia to make rapid strides now that the main producing area has been linked by pipeline with the seaboard, a distance of 350 miles. Only a minor proportion of the probable oil-producing territory of this State has yet come under development.

Elsewhere among South American countries Peru ranks after Venezuela on the production list with an output last year of 9,164,000 bbls. Peruvian production, which has been steadily increasing for a number of years, is all obtained from a comparatively small area near the coast, but there is reason to believe that the producing area could be extended inland if transportation difficulties could be overcome. The Argentine is the one other country in South America at present with an important oil industry, and this seems destined to grow one day to large proportions. Its progress, however, would be much more rapid if the present policy of the Government did not have the effect of discouraging the great oil companies of the world from taking a more active part in the development of the country's oil resources.

European Producers

Coming to Europe, we find Russia—third in order of importance among world producing countries—recovering some measure of her prewar importance in the petroleum industry. Being in possession of the confiscated properties of foreign oil enterprises, the present rulers of Russia have found in the country's oil fields probably their most important external source of revenue, and this they are exploiting to the full, although they are, at the same time, apparently starving their own country of oil in order that they may increase their exports and thereby swell their credits in foreign countries. Russia is undoubtedly rich in oil, and, apart from the areas now undergoing exploitation in the region of the Caspian Sea, it is probable that other rich fields exist in other parts of this vast territory. The nationalization of the industry is, however, a serious handicap to the development of these resources, and until the Russian people succeed in re-establishing a proper regime and in restoring the rights of private ownership, the oil industry is bound to suffer owing to lack of the advantages of competition and of commercial enterprise.

Rumania, which last year produced a total of 16,600,000 bbls. of oil—an increase of 3,300,000 bbls. over the 1924 total—is another country in which recent developments promise to result in a marked expansion of its oil industry. During last year, deeper drilling in old producing areas discovered new and prolific oil strata, and, at the same time, new areas which were previously looked upon as doubtful have responded most satisfactorily to the test of the drill. The output of Rumanian oil wells last year exceeded the highest prewar level by over 3,000,000 bbls., indicating that the Rumanian oil industry, which was greatly curtailed during the war owing to military exigencies, has now more than recovered its former position, notwithstanding that, since the war, it has been severely handicapped by certain political and economic factors. With these now less in evidence, the industry will, doubtless, show still further material progress in the near future.

At the present time Poland is the only other country of Europe with an oil industry contributing to an appreciable extent to the world's oil supplies, though France, Germany, Italy and Czechoslovakia are all producers in a small degree. Another country of some interest as a prospective oil source outside of these is Albania, where drilling is now in progress.

Africa and Asia

Apart from the production in Egypt and a very minor output from Algeria, Africa is virtually an unknown quantity from the point of view of oil reserves. Oil exploration over large sections of the Dark Continent offers very great difficulties, but to my mind it is taking an unduly pessimistic view to rule so vast an area out of all calculations as to future supplies of oil. More probably, if and when Africa is opened up, oil will be found there as elsewhere throughout the world, though naturally no one can speak with any assurance on this point. Australia, New Zealand, New Guinea, China and Japan may also be counted as possibilities, since the search for oil in none of these countries has as yet been carried on with any thoroughness.

Asia at the present time has two areas in the front rank of the world's producers: Persia, which occupies fourth place with a production last year of approximately 34,665,000 bbls; and the Dutch East Indies, which (with the output of British Sarawak included) produced 26,000,000 bbls. In addition to these areas, India gave the total of 8,500,000 bbls. Of Persia I speak, of course, with more intimate knowledge. It gives every evidence of being immensely rich in oil, its present output being limited solely by pipeline capacity and the problem of marketing the oil produced. In the Dutch East Indies and Sarawak production is increasing, and these islands should continue to constitute a valuable reserve for many years to come. India last year gave a slightly diminished production, but exploration work of a promising character is being carried on in this country, and as the industry is in capable hands the prospects of the maintenance of a steady production at approximately the present level for a considerable period to come seems certain, even should no further important fields be discovered there.

Potential Sources

I have confined myself in this brief review almost entirely to remarks upon known producing areas; but there are two other potential oil sources in Iraq of so great importance that no general survey of the oil industry would be complete without a reference to them. These are the great area under license to the Turkish Petroleum Co., an organization which includes in itself practically all the main oil interests of the world, and the new Naft Khaneh Field northeast of Baghdad. The much-discussed Mosul Field is regarded as most promising, lying as it does along an extension of the axis of the present producing area in Persia and the Naft Khaneh Field in the Transferred Territories of Iraq. Development of the Naft Khaneh Field is now being actively carried out by the Anglo-Persian Oil Co., and that of the Mosul area may be expected to follow rapidly now that the Turco-British treaty relating to Mosul has been signed. These two areas may prove very rich sources of oil and may add largely to the world's oil supply.

D. B. DOW TO STUDY INCREASED RECOVERY

A comprehensive investigation of the problem of increasing the recovery of oil from sands has been undertaken by the Bureau of Mines at the petroleum experiment station, Bartlesville, Okla.

D. B. Dow, who has been in charge of the Laramie, Wyo., office of the Bureau of Mines, has been transferred to Bartlesville station to take charge of this important work. Mr. Dow has made a study of the solubility of natural gas in crude oil and the effect of dissolved gas on viscosity.

TULSA OIL CO. CHARTER

The Tulsa Oil Co. has been incorporated by B. B. Blair and Johnson D. Hill, both of Tulsa, Okla. The authorized capital is $75,000, all of which is issued.

Mr. Blair and Mr. Johnson were formerly executives of the Waite Phillips Co., which was sold last year to the Barnsdall Oil Co. The Tulsa Oil Co. has opened offices in the First National Bank Building, Tulsa, Okla. It is to be strictly a producing company.

NORTH AMERICAN CAR CORPORATION

Announces the Re-opening of its

STEEL PLATE CONSTRUCTION DIVISION

under competent management, and with the experience and equipment to render unusual service, at reasonable prices, on all projects involving steel plate construction.

A well-rounded organization equipped to handle contracts involving

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any size, any capacity, anywhere

Smokestacks
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The quality of work done by the North American Car Corporation is guaranteed by nearly two decades of service to the petroleum industry.

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A gas cooler that saves space--- labor--- operating cost

The G-R Vaneflo Gas Cooler

can be operated as an inter-, after-, or pre-cooler for casinghead gas and is especially adapted to absorption and compression type natural gasoline plants.

This cooler **saves space** because its counter-current flow of gas and water and its high rate of heat transfer. The twin design in which it can be furnished results in the most compact construction on the market.

The G-R Vaneflo Gas Cooler **saves labor** because built so as to be easy to inspect, easy to clean, easy to erect, and easy to transport to new locations as required by changing plant conditions.

It **saves operating cost** because of its low gas pressure drop, sturdy, durable, trouble-proof construction, and highly efficient design.

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Send full information, without obligation, on the G-R Vaneflo Gas Cooler.

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O&GJ9-16-26

CANADIAN FIELDS

(Continued from Page 60)

nadian Southern's No. 1, LSD 9, Section 1-20-3w5, after being on the pump for several years with a reputed production of 15 bbls., has resumed drilling at 2,436 feet as a deep test.

Dalhousie Oil Co.'s No. 1, LSD 4, Section 18-20-2w5, is at 3,580 feet and drilling. Dalhousie's No. 3, LSD 10, Section 13-20-3w5, is at 3,345 feet and fishing for part of the 8-inch casing at the bottom of the hole. Dalhousie's No. 5, LSD 16, Section 30-19-2w5, is at 2,110 feet and drilling for 12½-inch casing.

Difficulties Overcome

Big Chief Oil Co., Section 5-20-2w5, is at 2,350 feet and drilling. Work has been delayed for several months by drilling difficulties, the crew having to go back to 1,100 feet to straighten out the hole; after which trouble was experienced with caving, water, and frozen casing. The heavy water flow was cemented off at 1,525 feet and the test is now making hole rapidly.

Dutch-Canadian Oils, completing the old Record deep well, LSD 14, Section 4-19-2w5, has taken the name of Dutch-America Oils, Ltd., owing to the fact that a Canadian-Dutch Oil Co., is at present incorporated in Ontario. The test is cleaning out the hole and fishing for lost tools at 4,327 feet.

Great Western Oil Co.'s No. 1, SE, Section 7-20-2w5, is at 4,225 feet and drilling in a mixture of shale and lime, with barely enough gas to light. Open hole for the 10-inch casing has been drilled from 3,446 feet. At this depth the test has apparently not yet reached the top of the Madison limestone, which, taken with the logs of adjacent wells, indicates it is located in a syncline. A new contract has been let at $15 a foot to the Union Drilling & Development Co. to carry the hole to 4,500 feet, but it is planned to go deeper if necessary. A spiral stem is being used in the deep drilling.

Stockmen Oils, Ltd., Section 27-20-3w5, has installed a new cable and is setting 15½-inch casing at 1,200 feet. Waste oil from the Dalhousie wells is being used for fuel. British Dominion's No. 1, LSD 4, Section 5-20-2w5, has resumed drilling at 2,250 feet after setting 12½-inch casing. Calmont Oils, LSD 1, Section 1-20-3w5, is at 1,750 feet and drilling, with 250 feet of open hole below the casing. The drill is in the Lineham sands within 500 feet of the top of the Dakota. Okalta Oils, Ltd., LSD 1, Section 1-20-3w5, is rigged up ready to spud in. New Valley Oil Co., LSD 4, Section 6-21-2w5, is at 850 feet and drilling. Advance Oil Co.'s No. 2, LSD 14, Section 20-19-2w5, is drilling below 1,710 feet. This test is on the same structure where the Home Oil Co. secured shallow production around 1,990 feet in the Dakota. New Black Diamond Oil Co., LSD 1, Section 3-20-3w5, is at 1,000 feet and installing a new cable and heavier tools. Some traces of gas were met around 900 feet. Highland Oils, LSD 5, Section 5-20-2w5, is at 1,450 feet and setting the 15½-inch casing. Cooper Nanton Oils' No. 1, LSD 2, Section 7-20-2w5, is at 3,300 feet and drilling. New McDougall Segur, LSD 14, Section 12-20-3w5, is drilling at 2,100 feet.

Derrick Up

Dolomite Oils, Ltd., LSD 8, Section 1-20-3w5, has the derrick up and is waiting for equipment. Titan Oils, Ltd., LSD 2, Section 18-20-2w5, will start rigging up this month. F. C. Beresford is managing director and field superintendent. Stanmore Oil & Refining Co. has spotted a test in LSD 11, Section 4-22-3w5, in the New Valley section of the field. Angus Oils, Ltd., LSD 3, Section 3-21-4w5, is hauling material. Mid-Valley Oil Co., LSD 12, Section 5-20-2w5, has derrick up. Locarno Oils, Ltd., LSD 12, Section 5-20-2w5, has derrick up and is waiting for equipment. Allegheny Oils, Ltd., has spotted a test in LSD 6, Section 16-19-2w5. Derrick Oils, Ltd., has a location in LSD 2, Section 22-20-3w5.

Royalite Oil Co.'s No. 5, LSD 13, Section 7-20-2w5, is at 3,527 feet and drilling. Royalite's No. 6, LSD 16, Section 31-19-2w5, is at 3,079 feet and underreaming.

In the Jumping Pound district, 25 miles west of Calgary, Imperial Oil-Bow River's No. 1, LSD 15, Section 12-25-5w5, is reported at 3,700 feet and drilling. Light oil and wet gas showings previously reported around 3,400 feet, apparently failed to develop commercial production. In the Rice Creek Field, west of Nanton, Imperial Oil-Rice Creek's No. 1, Section 4-14-2w5, is at 4,720 feet and drilling.

In the Border fields, Imperial-Erickson Coulee's No. 1, LSD 13, Section 8-1-12w4, has mudded off the dry gas flow, estimated at 7,000,000 feet a day, and is going deeper for oil. The gas flow was met at 2,372 feet and the drill is now below 2,400 feet. Devenish Petroleums, LSD 5, Section 27-5-14w4, is reported at 670 feet, with 20-inch hole most of the way. Some troubles were experienced with water and caving, and a string of 15½-inch casing is being run. In the Foremost Field, Imperial-Burdett's No. 1, Section 8-11-11w4, is at 2,110 feet and drilling. On the Quarantine Reserve, near Coutts, Urban Oils, Ltd., is rigging up to resume drilling at 3,042 feet.

In the Highwood district, Imperial-Highwood's No. 1, LSD 3, Section 36-18-3w5, is at 180 feet and drilling.

Moose Mountain

In the Moose Mountain area, Reserve Oils, drilling on the Morley Indian Reserve, is at 1,877 feet with a diamond drill test, and apparently still in the Benton shale, though the Dakota sand was looked for between 1,550 and 1,700 feet. Wabash Oils, Ltd., on the Lea lease, is working on camp buildings. A Los Angeles contractor will put down the well. Signal Hill's No. 2, LSD 9, Section 34-23-5w5, is at 900 feet and has encountered three small shows of gas. Cherokee Oil Co., Section 33-23-5w5, is reported at 1,881 feet, and drilling.

Ranger Oil Co., which has a location in LSD 8, Section 1-20-3w5, in the Turner Valley Field, will drill first on the Sinclair structure south of the Turner Valley, in LSD 4, Section 6-18-2w5. Derrick timbers are on the ground but the rig builders have been held up by rough weather. The Ranger directors are: W. C. Walsh, president; Michael Herman, vice president; Hugh Walsh, director. The Sinclair structure is similar to the Turner Valley except that the Dakota sand is believed to outcrop, which would require considerably shallower drilling than in the Turner Valley Field.

In the vicinity of Castor, Alta., a syndicate of local business men have filed on 2,000 acres and are arranging a test for oil.

Wainwright Field

In the Wainwright Field, east of Edmonton, Anglo-Alberta Oil Co. will drill a test in the Wainwright Townsite for a natural gas supply for light, fuel and power purposes. Distribution will be handled by the Wainwright Gas Co. A rotary outfit will be used for the test. For the drilling the Anglo-Alberta rig will be supplied with excess steam from the municipal power plant. The test is rigging up.

Emerald Oils, Ltd., LSD 8, Section 30-45-6w4, is at 2,100 feet and fishing for a lost bit. Interior Oil Co., Section 36-44-7w4, is reported to have resumed with Roy Berray and L. P. Adams in charge of the drilling. The test is resuming at 1,500 feet with a new cable outfit. Wainwright Dome Oil Co., LSD 7, Section 31-45-6w4, is rigged up ready to spud in. Western Consolidated No. 2, Section 30-45-6w4, which got production at 2,231 feet, is having trouble with water getting through the cement. National Exploration Co., LSD 1, Section 30-45-6w4, has derrick up but is reported awaiting results from the Emerald well before spudding in. It is reported that the Alberta Refining Co. of Edmonton has contracted with the Ferdig Oil Co. for 500 bbls. a day of Montana crude at 35 cents above the posted field price.

On the Ribstone-Blackfoot anticline, Advance Oil Co. No. 3, LSD 1, Section 16-45-1w4, is drilling. Imperial Oil-

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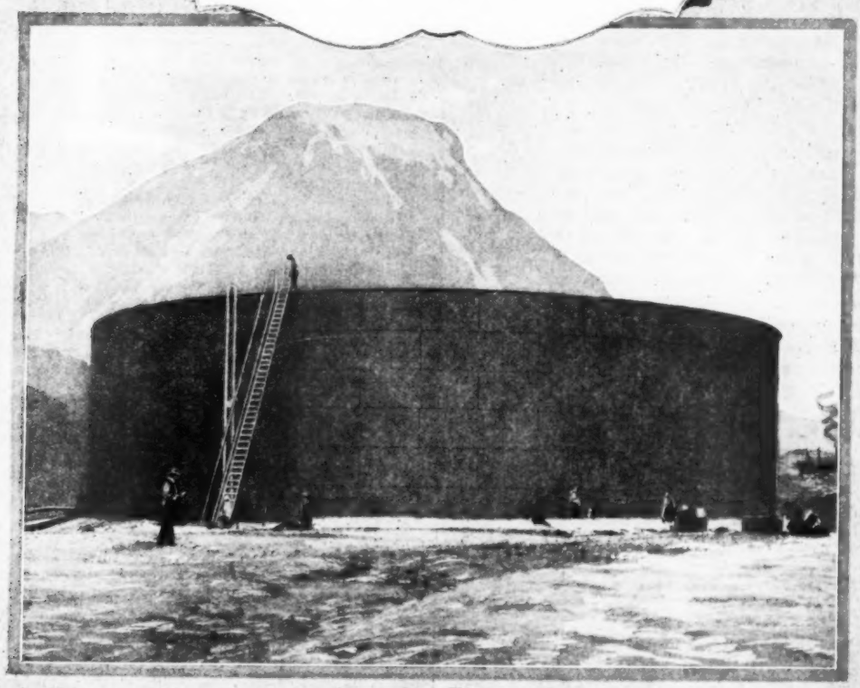

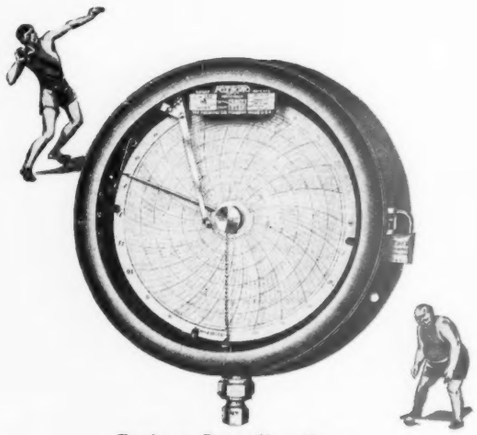

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THE COMPASS OF INDUSTRY

Ribstone No. 1, Section 5-45-1w4, is rigging up. Ribstone Oils, Ltd., LSD 1, Section 1-46-1w4, is drilling. The Oil Producers Corp. of Canada is arranging to ship a drilling outfit to the Ribstone Field this month for a test.

In the Upper Peace River district, northern Alberta, Black Rock Petroleum Co. near Fort Vermillion is reported drilling at 279 feet.

In the tar sand area near Fort McMurray, the Bituminous Sand Extraction Co. is continuing tests of the Absher process for extracting oil from the tar sands. It is reported that as much as 25 bbls. a day of heavy crude was secured by the earlier tests, but complete results of the experiments are not yet available.

Border Field

In the Border Field, Wolfe No. 2, on the Montana side, is reported on top of the oil sand at 1,435 feet. Cope Development Co. No. 3, Section 23-35-2w, is reported a commercial producer at 1,485 feet. Madison-Strange No. 2, Section 31-35-3w, has been flowing over the top of the 8-inch casing and is being put on the pump for a production test. It got production at 1,350 feet. McLaren Oil Co. is locating a test in SW Section 29-35-3w immediately north of the Dupont well. Monalta Oils, Ltd., which recently abandoned a deep test in Section 3-37-4w at 2,608 feet is making a new location to the west. Pass Oils, Ltd., of Lethbridge, Alta., has a location in Section 5-31-1w. D. Hagerman of the Queen City Oil Co. will drill the test. Inter-Provincial Oils, Ltd., of Calgary has been incorporated and will drill a contract test in Montana.

G. M. Ruby, geologist in charge of preliminary exploration for the Hudson's Bay-Marland Oil Co., is reporting to the head office in New York recommending extensive geological work in western Canada. Four geological parties have been engaged for some weeks in securing preliminary data in various parts of the Canadian West, and the further exploration plans of the company will be based on study of these preliminary reports. Official denial is given the report that a definite program involving 50 tests in the coming year has been determined.

In the province of British Columbia the Sumas Oil Co., drilling in the Fraser Valley 35 miles east of Vancouver, reports a fair gas flow with heavy pressure at 700 feet. The test will be deepened for commercial production.

In the Sage Creek area, southeastern British Columbia, Glacier Oil Co. is reported to have got an oil sand at 3,156 feet with a potential production estimated at 40 bbls. a day. The test is being deepened for larger production and is reported drilling at 3,216 feet. British Columbia Oil & Development Co. of Victoria, B. C., has located a test in the Sage Creek area.

Shell Company Operations

The Shell interests are reported to have carried on some preliminary geological work in the Okanagan Valley near Vernon, B. C., where a shallow test some time ago was reported to have got oil showings before being lost through quicksand at 500 feet. The report of the Shell gelogists on the area is stated, however, to have been unfavorable.

In Saskatchewan, Unity Valley Oil Co. No. 1, SE Section 23-41-24w3, which struck a big gas flow with incidental oil showings at about 1,470 feet is now at 1,515 feet and drilling. The gas flow, estimated from 10,000,000 to 15,000,000 feet a day, was cemented off. The test is being deepened for oil. Unity Valley No. 2 is starting work a quarter mile east of No. 1 and close to the siding at Vera, Sask. No. 2 will be drilled with a standard outfit to test a sand at 1,200 feet where it is claimed a potential oil production between 30 and 40 bbls. a day of 30 degree oil was met in No. 1. S. F. Flater is field superintendent. No. 1 was drilled with a rotary outfit. The test is located on one of a series of domes in central western Saskatchewan, the territory, according to some geologists, being similar to the Texas salt dome country only much larger in extent.

The strike at Unity Valley has been followed by some new drilling in Saskatchewan. Near Simpson, the Simpson Oil Co. is reported drilling a test in Section 9-29-25-w2. In the Riverhurst area, the Riverhurst Oil & Gas Co. is drilling a test in Section 29-22-7w3. The Great Plains Oil & Gas Co. has spotted a test in Section 29-8-3w3, near Limerick. Considerable new leasing has been done by various interests.

In the province of Manitoba the Manitoba Mutual Oil & Development Co. has a test drilling in LSD 9, Section 34-7-10w1, in the Trehenne-Holland district. This test is reported below 600 feet and running double tour. The location is about 85 miles southwest of Winnipeg. The Dakota sand is thought to lie between 800 and 1,000 feet. In the Mafeking district, the Ed Doherty Syndicate, LSD 12, Section 2-43-26w1, is at 1,640 feet and drilling.

C. J. Yorath, president of the Canadian Western Natural Gas, Light, Heat & Power Co., has made an offer to supply natural gas to the cities of Regina, Saskatoon and Moose Jaw, in Saskatchewan. It is not planned to pipe gas from the Alberta fields, but to develop new gas production in Saskatchewan to supply these communities. No specific prices have been submitted.

The Canadian Western Natural Gas, Light, Heat & Power Co. has been supplying gas to the cities of Calgary and Lethbridge and to the towns of Macleod, Granum, Nanton, Claresholm and Okotoks for the past 14 years. It has approximately 14,000 customers, 303 miles of transmission lines, 81 miles of distribution mains, and controls gas fields with a total open flow of 98,140,000 feet a day. The Northwestern Utilities, Ltd., an affiliated company, supplies natural gas to the city of Edmonton and the towns of Viking, Riley, Bruce and Tofield from its gas field at Viking, and, since starting operations in 1924, has laid more than 80 miles of transmission lines, 85 miles of distribution mains, with approximately 6,500 customers, and has drilled 12 wells in the Viking Field with a total open flow of 67,000,000 feet a day.

The Wainwright Gas Co., which has secured a contract supply natural gas to Wainwright, Alta., has started work on the distributing system. It is planned to deliver gas from producing wells near Wainwright this winter.

GULF COAST FIELDS

(Continued from Page 52)

at 3,325 feet. The Atlantic Oil Producing Co. has a pumper in No. 3 Moore at 3,350 feet, after working it over. The Texhoma Oil Co.'s No. 9 Chesson is bailing at 3,400 feet.

The Sun Oil Co. is below 4,519 feet in No. 2 Brown in the southeast end of the pool. The Rycade Petroleum Corp.'s No. 1-C State land, in Cow Bayou, is drilling at 3,415 feet. The Texhoma Oil Co. is cutting the liner in No. 16 Chesson at 4,600 feet. The Humble Oil & Refining Co.'s No. 27-C Chesson is drilling around 3,600 feet. The Orange Petroleum Co.'s No. 7 Chesson is at 3,354 feet. The Brownie Babbittee Oil Co.'s No. 3 McLean is drilling around 3,600 feet, and the Rex Petroleum Co.'s No. 2-B Carbello is at 4,090 feet. The Humble company is working over No. 2 Winifree. The Kishi Development Co.'s No. 6 McGuire is idle.

In the Batson Pool, the Gulf Production Co.'s No. 1 Cruse is at 2,980 feet. The Paraffine Oil Co.'s No. 67 Paraffine will be deepened. A location has been made for No. 33 Heywood. The East Batson Oil Co.'s No. 9 Counselman is drilling at 766 feet. The Ada Belle Oil Co.'s No. 109 Texas is around 1,090 feet. S. R. Buchanan's No. 91 Milhome is rigging.

In the Saratoga Pool, the Rio Bravo Oil Co.'s No. 11 Jordit is at 1,466 feet. Paggi Brothers' No. 43 Queen City is idle.

At High Island, the Gulf company's No. 5 Smith is pumping 50 bbls. That company has temporarily abandoned work there and moved the rigs to Spindletop and Pierce Junction. The Sun Oil

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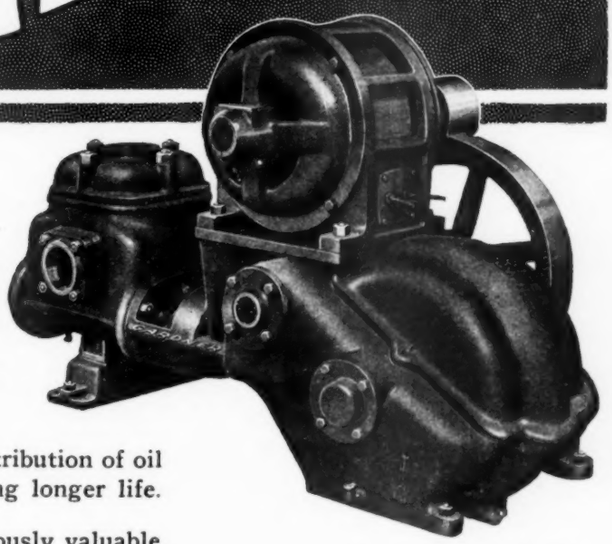

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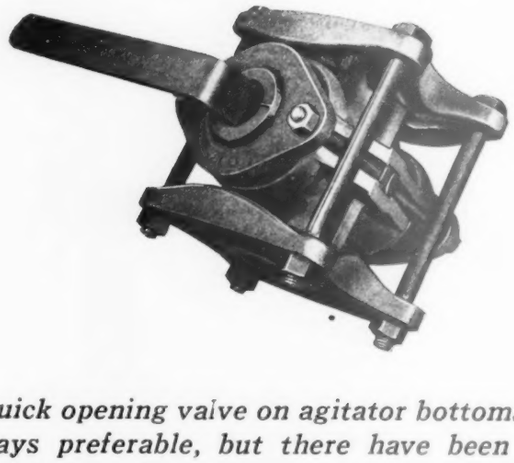

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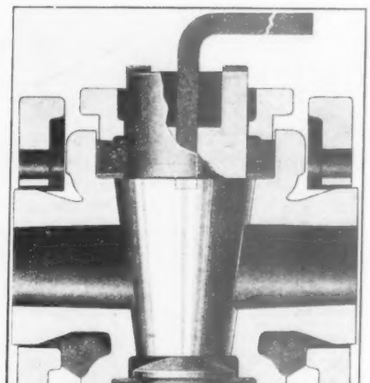

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Co.'s No. 6-C Cade is drilling around 4,475 feet and No. 11 Cade is at 2,655 feet. No. 9 Lockhart is idle at 280 feet. The Island City Oil Co. is preparing to work over an old well in the shallow sand.

The Premium Oil Co. abandoned No. 1 Mitchell on the north side of the South Liberty Pool at 4,075 feet. The Humble Oil & Refining Co. is drilling Nos. 3 and 4 Welder in the west side extension and the Gulf company, No. 1 Beckman.

Nash Dome

The Rycade Petroleum Corp.'s No. 8 Wisdom, at Nash Dome, 8 miles southeast of Damon Mound on the line of Brazoria and Fort Bend Counties, is making around 1,000 bbls. per day. It came in August 25, with initial flow of 1,500 bbls. The company has made locations for No. 9 Wisdom, 300 feet south and 100 feet east from No. 8, and for No. 10 Wisdom, 300 feet north and 200 feet west from No. 8. The Rycade corporation has all the available acreage around the dome and the pool to itself.

On the northeast side of the dome at Boling, The Texas Company's No. 1 Farmer is drilling around 3,700 feet, with no show. The Sun Oil Co.'s No. 1 Farmer is at 1,810 feet. The Texas Company's No. 2 Felder, on the northwest side, is at 3,526 feet.

At West Columbia, the Hyde Production Co.'s No. 2 Masterson, is at 2,090 feet. The Texas Company has locations for Nos. 82 Hogg and 12 Abrams.

South Louisiana Pools

In the Lockport Pool, in Calcasieu Parish, the Vacuum-Gulf companies' joint No. 3 Bordages is flowing 2,000 bbls. choked down. It came in last week rated as high as 10,000 bbls., but has been pinched in from the beginning. Same joint interests are setting 6⅝-inch casing in No. 2 Lock-Moore, at 5,875 feet. A location has been made for No. 4 Bordages. No. 1 Bayou d'Inde is drilling at 3,232 feet, and No. 2 is rigging to start drilling. Nos. 6 and 8 Miller are both fishing at 3,980 and 4,325 feet respectively. No. 10 Miller is drilling at 5,410 feet, with a location for No. 12. A derrick is up for No. 3 Friedberg & Wolf.

In the Jennings Pool, the Gulf Refining Co.'s No. 38 Arnaduelt is drilling around 2,100 feet.

In the Edgerly Pool, the Rex Petroleum Co.'s No. 3 Hunter is sidetracking at 2,380 feet. C. M. Crott's No. 14 Lilliard is bailing at 1,670 feet. The Edwards Oil Co.'s No. 4 Landry is working over.

In the Vinton Pool, the Vinton Petroleum Co.'s No. 56 Gray is bailing at 2,450 feet. The Edgerly Petroleum Co. is doing the same in No. 11 Vincent at 3,400 feet, as is the Gulf Refining Co.'s No. 2-A Gray at 2,550 feet.

The Gulf Refining Co.'s No. 42 Vincent is fishing at 3,875 feet. No. 5 Gray is drilling at 1,765 feet. No. 40 Star is around 2,765 feet. The Texas Company's No. 17 Vincent is at 1,876 feet. No. 2-C Gray is at 3,413 feet. The Vinton Petroleum Co.'s No. 22 Rescue is at 1,555 feet. The Edgerly Petroleum Co.'s No. 10 Vincent is fishing at 3,400 feet. Ratcliff and others' No. 1 Perry is below 3,200 feet.

Two deep wildcat tests are drilling in Cameron Parish. The Pure Oil Co.'s No. 3, at Sweet Lake, is around 5,850 feet. The Sun Oil Co.-Humble company's joint No. 1, in the Johnson Bayou section in the southern part of the parish, is drilling around 3,900 feet.

Coastal Wildcats

Brazoria County: Clemens Dome, Roxana Petroleum Corp.'s No. 3 Clemens is drilling around 1,554 feet. No. 1 Pabst, location. Allen Dome, No. 3 Allen is drilling at 986 feet. No. 1 Dunn, location. Gulf Production Co.'s No. 1 Perry, Stratton ridge, idle. Ridge Oil & Gas Co.'s No. 1 Dannebaum, idle.

Fort Bend County: At Long Point, Gulf Production Co.'s No. 15 Davis is drilling at 765 feet. No. 16 Davis is drilling around 765 feet. No. 17 Davis is drilling at 786 feet. The Texas Company has a location near Beasley.

Jefferson County: At Fannette Dome, Gulf Production Co.'s No. 2 Bordages is drilling at 4,785 feet. Near Westbury, Port Arthur Development Co.'s No. 4 is drilling around 515 feet.

Wharton County: J. W. Rich and Humphrey Corp.'s No. 1 Malone, 5 miles west of Wharton, shut down at 1,625 feet.

Waller County: Rem Oil Co.'s No. 2 Maxwell is rigging.

Walker County: The Arkansas Fuel Oil Co. has a location 14 miles west of Huntsville.

Matagorda County: Gulf Production Co.'s No. 6 Craig, Hawkins Dome, just started drilling. No. 1 Parkinson is drilling around 3,800 feet; No. 2 Sanborn, a location.

Chambers County: Osage Oil Co.'s No. 1 State land, south of Moss Bluff, rigging.

In South Louisiana, F. F. Hintze is rigging No. 1 Beckenstien, Calcasieu Parish, and the Sabine Oil Co.'s No. 1 Herbert, Breaux Bridge, St. Martin Parish. Spencer and Rhodes' No. 1 Somerset, Tensas Parish, is drilling below 2,545 feet.

SPINDLETOP DEEP SAND DEFINED NORTHEAST

(Continued from Page 52)

on the west side. The rules of the Oil and Gas Division of the Texas Railroad Commission applying to space been wells are not enforced in the Gulf Coast territory because the productive area around these saline domes is limited.

The Gulf Production Co.'s No. 2 Jack-Duff 1½ acres is drilling at 3,270 feet. No. 3 is at 2,565 feet, No. 4 is at 645 feet with a derrick standing for No. 5. The James Weed No. 4-A is at 4,200 feet, the deepest test to date there. A derrick is up for No. 6. No. 4 Roche is bailing at 2,490 feet with a derrick for No. 5.

On West Side

On the west side, the Grayburg Oil Co.'s No. 1 McLean is drilling at 3,276 feet. Rush & Pittman's No. 1 Hammon is around 3,100 feet. The Favorite Oil Co.'s No. 1 Weed is drilling around 4,190 feet. Other tests drilling include the Deep Sand Oil Co.'s No. 1 Howell at 3,445 feet, with No. 2 rigging. W. B. Flynn's No. 1 Gladys is at 987 feet. Hines and others' No. 1 Ewing is at 3,565 feet. Paggi Oil Co.'s No. 3 Gordon is drilling at 3,300 feet. The Walker Oil Co.'s No. 1 Quinn is at 3,345 feet. A location was made for No. 2. The Turnbow Oil Co.'s No. 1 Banks is a location as is the Unity Oil Co.'s No. 88 McFaddin. The Kinnear Oil Co. made a location for No. 1 Gladys.

In the opinion of the Attorney General's department at Austin the Jefferson County Commissioners cannot lease the mineral rights under the highway that cuts through the east side extension, running north and south through the field. Another highway intersects it and extends westward. The highways are in the heart of the east side deep sand field. It was proposed to lease roadways to the highest bidder and build other roads across the prairie to skirt around the pool.

The Yount Lee Oil Co. is drilling Nos. 8 and 9 fee, 10-B Gladys and 11 and 12 McFaddin. The company is running part of its production into its own steel storage on the Neches River, east of the pool.

The Gulf Production Co.'s No. 1 Weed, was the first well by the Gulf company on the west side and produced about $300,000 worth of oil from 2,600 feet before it quit flowing and was drilled deeper. The Walker Oil Co. cored a sand in No. 1 Quinn at 3,250 feet. The Hyland Oil Co. is bailing No. 1 fee. The Atlantic Oil Producing Co. set 6⅝-inch casing in No. 5 McLean at 3,330 feet. The Gulf Production Co.'s No. 2 Jack-Duff on the south end of the west extension of the deep sand area, is in sand at 3,220 feet. No. 4 is below 2,670 feet.

More Tanks Constructed

Four 55,000-bbl. steel tanks built for the Yount Lee Oil Co. are completed and that company is running 10,000 bbls. per day of its production into them. Fifteen

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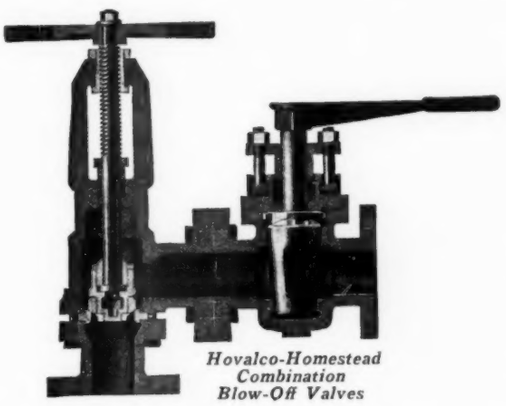
Buying Homesteads assures the right valve for the job

Every Homestead Valve has a place of its own in the Oil Industry—won by 34 years of manufacturing experience, and actual superiority in service.

That's why, more and more, operators are demanding Homestead quality in every valve they buy. They are learning that Homesteads are the valves of no regrets—and no repairs.

For instance—the Homestead-Hovalco Blow-Off Valve:

To operate—First, Open the Homestead Quarter-turn Valve.



Hovalco-Homestead Combination Blow-Off Valves

Second, Open the "Hovalco" and control the flow.

Third, Close "Hovalco."

Fourth, Close Homestead—Thus you keep the Homestead Valve in good tight condition for emergency use.

To renew or regrind the Hovalco parts keep the Homestead closed and make the changes any time. It is not necessary to close down the boiler.

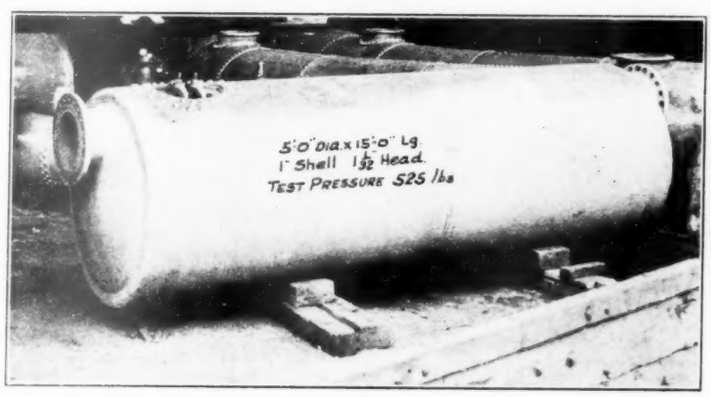
Any part of the Hovalco subject to any wear can be renewed, with greater ease than any other valve made. Look closely at the construction.

1926 Catalog, showing complete line, will be sent on request.

Homestead Valve Manufacturing Company, Homestead, Pa

HOMESTEAD

PRODUCTS: *Quarter Turn Valves—Straight-Way Three-Way Four-Way Types—Full Round-Way Valves—Cast Steel Refinery Valves—Lubricated Valves—Hovalco Blow-Off Valves—Protected Seat Globe Valves B & O Pat.—Protected-Seat Hydraulic Operating Valves*



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Welded equipment for refineries, chemical works, and many other manufacturing companies, consisting of the following items:

Agitators
Air Piping
Absorbers
Condensers
Heat Exchangers
Tanks, steam jacketed
Headers
Receivers
Stills
Vulcanizers
Special Plate Pipe
Digestors

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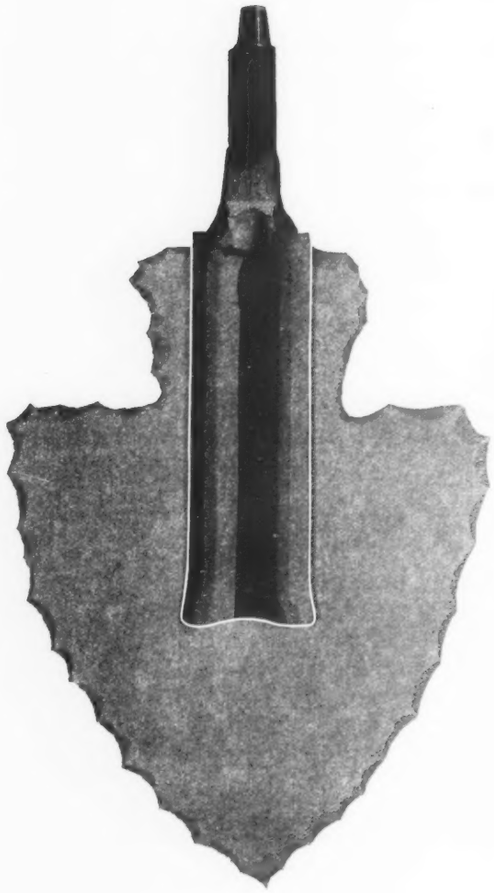

Irresistible

Like the arrowhead of the aborigine, MURRAY Bits recognize no drilling obstacle.

The fine discrimination of the laboratory expert has determined the exact measure of temper that will maintain a lasting cutting efficiency on MURRAY BITS in the most difficult formations.

The record of MURRAY BITS with experienced users is ample justification for their widespread popularity.

Murray Tool & Supply COMPANY
TULSA OKLA.

more steel tanks are being constructed. It is expected to complete four each week.

The tanks are being constructed by the Petroleum Iron Works under the direction of A. M. Johnson, vice president and general manager for the company in the Southwest. The company made a record on this order, which was given August 3 for 20 of the 55s. The steel was fabricated and left Sharon, Pa., on September 4 arriving at Beaumont Wednesday. Material for 20 tanks was shipped on a special train of 42 cars. Another special train load of tank material has left Sharon and is expected at Beaumont early in the week.

The Yount Lee Oil Co. decided to build its own tankage and store its production when the deep sands proved to be profitable and the pipelines cut the price of the crude. Then the Petroleum Iron Works was given a contract for 40 steel 55,000-bbl. tanks at a cost of approximately $1,200,000.

Shipping tank material on special trains is an innovation inaugurated during the boom days in the Mexia Field. These trains speed across the country from Sharon, Pa., on passenger train schedules. Those who like to indulge in reminiscences will recall when it required a month or more to transport tank material to the new Coastal pools and another month to erect the tank.

A windstorm struck the Spindletop Pool Friday afternoon, demolishing 21 derricks in the old cap rock section and 5 in the deep sand region. The damage is estimated at $30,000. Two field workers were slightly injured.

MAGNOLIA PETROLEUM'S AUGUST PIPELINE RUNS

The Magnolia Petroleum Co.'s pipeline runs from Kansas, Oklahoma, Texas, Arkansas and Louisiana in the month of August were as follows:

Oklahoma-Kansas	
August	39,937.80
Burbank	48,790.54
Duncan	52,483.17
Cement	21,958.32
Cushing	122,071.12
Healdton	203,760.41
Hewitt-Graham	141,140.12
Walter-Beaver Creek	8,809.23
Wewoka	406,783.54
Yale	70,189.48
Total Oklahoma-Kansas	1,115,863.73
Texas	
Archer	69,749.85
Burk	80,025.86
Coleman	181.56
Comanche	24,925.85
Electra	111,788.44
Heavy Corsicana	8,913.38
Henrietta	2,898.25
Iatan	3,134.19
Luling	496,476.03
Lytton Springs	84,645.56
Mexia-Wortham	52,859.92
Mirando	125,846.41
Olden	19,500.52
Panhandle	298,203.63
Panola County	128.52
Stephens	13,269.93
Thrall	1,777.86
Light Corsicana	17,991.01
Gulf Coast	54,529.14
Total Texas	1,466,845.91
Louisiana	
Haynesville	5,474.34
Bull Bayou	38,178.75
Cotton Valley	20,196.10
Pine Island	16,667.00
Total Louisiana	80,516.19
Arkansas	
El Dorado, Ark.	70,515.90
Smackover	103,859.35
East El Dorado	2,180.80
Total Arkansas	176,556.05
Grand total	2,839,781.88

AUSTRALIAN OIL TAX

The Australian House of Representatives is acting favorably on the new Commonwealth Roads Bill to spend $200,000,000 during the next 10 years on Australian roads. The Government desires to ascertain the official views of the separate states on the scheme, although, with the exception of New South Wales, all have indicated their intention of signing the agreement. It was thought for a time the Federal Government would be compelled to drop the bill, thus automatically revoking the proposed extra duty of 4 cents a gallon on petrol which was intended to help to provide funds for the road construction scheme.

ROCKY MOUNTAIN AREA

(Continued from Page 60)

off at 125 bbls. This location is somewhat down the slope of the structure, making the well deeper than the general average for the field.

The Producers & Refiners Corp. has abandoned the wells in the north end of Crooks Gap, Carbon County. The wildcat drilled there last year had a showing for a commercial well but further development failed to show anything worth while and the area is therefore abandoned.

In the Sand Draw Field, The Texas Company, on Section 15-32-95, is drilling again after mudding off the gas flow and the hole is at 3,050 feet and in shale. The hole is filled with a barium sulphate water to hold in the gas pressure and drilling is slow.

Cancel Montana Permits

In Montana there is much activity at the land office due to the Government's policy of cancelling permits on holdings where the permit holder has done no work. Several select tracts bordering on the edge of the Sunburst Field have been cancelled recently and are now open to applicants and also many other tracts in wildcat areas or where wildcat wells have been drilled, are now open again as the former holders are without any claim.

The Aerolite Oil Co. is at 1,135 feet in the Devil's Basin, in central Montana, south of Winette and the hole is thought to be within 50 feet of the sand. This structure has produced some black oil that is such poor quality it has never been marketed, but the Aerolite well hopes to find a higher grade crude at its location.

A wildcat test, drilling about 10 miles west of the Sunburst Field has created some excitement by striking a showing that appears to be commercial in size. This well is being drilled by a syndicate of Idaho people and is located on Section 1-35-5, on the Ben Berger ranch in Glacier County. According to scouts who have visited the well, the showing will make a 10-bbl. producer. The depth is 2,485 feet.

The Julian Petroleum Co. of California, which recently purchased the holdings of the Rice and Fulton companies in the Sunburst Field for $3,000,000, has opened an office in Great Falls, Mont., under the name of the California Eastern Oil Co., with J. Battersby as general manager. While the company has not given out any statements regarding its future operations, the oil men of Great Falls and Sunburst expect to see the new company place a refinery in that district to handle the production.

Montana's Largest Gasser

The Sunburst Oil & Gas Co. brought in what is considered the largest gas well ever found in Montana. This well is on Section 36-33-2, and the gas was found in the Sunburst sand at 1,300 feet. The well will be cased to shut off the gas and then drilled down to make a test of the Ellis sand, which is expected about 1,450 feet. There is some more talk of piping the gas from the Sunburst Field to Great Falls and supplying that city.

The wildcat drilling on Section 31-32-2, by the Zenith Oil Co., south of Shelby, is due in any time and is attracting much attention as its location is such that if production is found it will add at least 4 square miles to the Sunburst Field on the south. The hole is now at 2,045 feet and has some gas and some oil showings.

The California Co. brought in a small well on Section 28-35-2, that will make about 25 bbls. after being shot in the Ellis sand. The Ferdig Oil Co. on the Lewis ranch, found oil at 1,438 feet in the Ellis sand and shot, it will make a small pumper.

The Ohio Oil Co. brought in four small producers in the central part of the field, all in the Ellis sand, and these new wells will average 20 bbls. each.

Black, Sivalls & Bryson have opened a branch office and storage yard at Kevin to supply tanks to the operators of the Sunburst Field.

In South Dakota, the the Irish Creek

(Continued on Page 143)

We sincerely believe that a refinery equipped with
Kellogg pipe stills
Alcorn radiant heat furnace with Carborundum boxes
Kellogg fractionating towers, and
Cross cracking units
will yield the greatest returns from any type of crude.

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PUMPS, like salesmen, are judged by the customers they get and keep. When you choose G. & B. pumps, you are really hiring capable salesmen that can always be counted on to make their quota of sales. Accurate and dependable in performance, of attractive appearance, fast in delivery, they promote business and build good-will for you, your product and your distributors.

Let us send you our T-177 bulletin. It is a booklet you would want to read before buying your next visible equipment.

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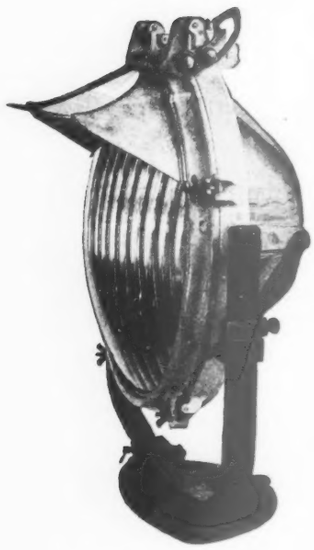
Exceptionally attractive in appearance, the G & B T-177 visible pump meets all the requirements of the filling station. It is accurate, fast, safe in delivery, and built strong to stand the strain of continuous service. Made in five and ten-gallon sizes; hand or air operation, visible measure mechanically controlled, approved by the Underwriters.

PUMPS THAT HELP YOU SELL



Thirty small lamps
vs.
One Pyle-O-Lyte

THE loading rack at The Panhandle Refinery, Wichita Falls, Tex., was lighted by thirty 50-watt lamps strung from poles. Unless a man was working under a lamp he had to have a flashlight.

Now, the Pyle-O-Lyte floodlight projector that lights part of the refinery also lights the whole of the loading rack. Lighting is uniform and covers the whole working area.

Three Pyle-O-Lytes, each burning a 1000-watt lamp, light the entire refinery and provide "75% more light" than the old layout of small lights which consumed 7225 watts. Besides better light, Pyle-O-Lytes save over half in power.

Send for bulletins describing Pyle-O-Lytes and find out what they can do for your plant.

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THE PYLE NATIONAL COMPANY CHICAGO
TRADE MARK REGISTERED

OGJ9-2Gray

EASTERN FIELDS

(Continued from Page 64)

is a good gasser. In McKim district, the Walnut Run Oil Co.'s second test on the R. T. Eddy farm is a good gasser in the third salt sand. In Grant district, in Ritchie County, the Aetna Oil & Gas Co.'s second test on the George Morris farm is a duster in the Squaw sand. In Henry district, Clay County, the Ohio Fuel Oil Co. has completed No. 12 on the J. B. Casto 220 acres good for 15 bbls. a day in the Big Injun sand. In Central district, Doddridge County, C. H. Pigott has completed No. 5 on the J. S. Nester farm. It is good for 10 bbls. a day in the Maxon sand.

Tyler County

In Union district, Tyler County, the Reno Oil Co.'s No. 6 on the Rachel Hissam farm is not good for more than 2 bbls. a day. In the same district, Albert Neeley's test on the William Rice farm is a duster. Morgan Brothers had the same luck at a test on the Neely Wicken farm.

In Clay district, Wetzel County, the Pittsburgh & West Virginia Gas Co.'s second test on the Amos Jolliffe farm is a gasser in the Big Injun sand. In Grant district, Ritchie County, L. N. Rinehart has drilled No. 3 on the Rosetta Mitchell farm into the Big Injun sand showing for 30 bbls. a day.

Gasser Turning to Oil

Last year the Clay District Oil & Gas Co. drilled a test on the Thomas Tennant farm, in Clay district, Monongalia County, into the Bayard sand and developed a gasser. It is now showing oil and will make a light pumper. In Murphy district, Ritchie County, Cochran & Funk have drilled down old No. 5 on the McGregor heirs' farm. It is dry and abandoned.

In Harper district, Roane County, the Grass Creek Oil & Gas Co. has completed a test on the Bert Davis farm. It is a very light gasser. In Smithfield district, Roane County, the United Fuel Gas Co.'s test on the J. B. Vineyard farm is a gasser in the Big Injun sand. In Geary district, the same company has a gasser in the same formation at a test on the S. R. Tawney farm.

Drilling and Starting Tests

In Sherman district, Calhoun County, the Hope Natural Gas Co. has started to drill a test on the Mary Whipkey farm. In Center district, the Ohio Fuel Oil Co. is rigging up on the T. McDonald farm. In Otter district, Braxton County, the Pittsburgh & West Virginia Gas Co. has a rig up on the Harriet Friend farm. In Center district, Gilmer County, the Mill Fork Oil & Gas Co. is building a rig on the U. S. Upton farm. In Grant district, Ritchie County, the Junior Oil Co. has started to drill on the John Hickman heirs' farm. In Reedy district, Wirt County, Kerr Brothers are drilling on the J. T. Owens farm.

Upshur County

In Upshur County there is a little new test work under way and starting. In Washington district, the Carnegie Natural Gas Co. has a rig up on the George Racing farm. In Banks district the same company has a rig up on the D. M. McQuain farm. In Collins Settlement district, Lewis County, the Mud Lick Oil & Gas Co. has the rig completed for a second test on the E. G. Davisson farm. The same company has a rig up on the D. M. Watson farm.

Located 5 miles northwest of Clay Station, Geary district, Roane County, the Morley Oil Co. has completed in the Big Injun sand a test on the Lower Grannys Creek schoolhouse lot, a gasser, estimated to be good for 250,000 feet.

In DeKalb district, Gilmer County, the Pittsburgh & West Virginia Gas Co. has completed a test on the R. W. Bartlett farm. It is a gasser in the Big Lime formation. In Glenville district, the same company's test on the J. Hendrick farm is dry in the Big Injun sand. In Eagle district, Harrison County, the same company is through the Speechley sand at a test on the A. M. Morrison farm. It is a fair gasser.

Braxton County

In Birch district, Braxton County, the Ohio Fuel Oil Co. has a gasser in the Big Lime formation at a test on the James Barth farm. In Sherman district, Calhoun County, the Euclid Oil & Gas Co. has drilled deeper an old well on the Creed Yoak farm. It is good for 5 bbls. a day in the salt sand. In Sheridan district, Calhoun County, Godfrey L. Cabot's test on the Jessie Ward farm is a gasser in the Big Injun sand. In Lee district, Mr. Cabot is rigging up on the C. A. Jarvis farm. In Union district, Ritchie County, A. L. Britton & Co.'s second test on the J. A. Hall farm has a show of oil in the Big Injun sand. In Center district, Gilmer County, the Hope Natural Gas Co.'s test on the John N. See farm is a gasser in the Big Injun sand.

Drilling and Starting Tests

On Green Creek, Harper district, in Roane County, the United Fuel Gas Co. has the rig completed for a test on the Simmons-Depew farm. In Geary district, the Elkins Oil & Gas Co. is drilling on the Fred Smith farm. In Walton district, the United Fuel Gas Co. has started to drill on the William Campbell farm. The same company has made seven locations in this district. In McClelland district, Doddridge County, the Little Five Oil Co. has a rig up on the Charles Digman farm. In Church district, Wetzel County, the Manufacturers Light & Heat Co. has started to drill another test on the Hannah Stump farm.

In Simpson district, Harrison County, 7 miles west of Clarksburg, Harrison County, the Bridgeport Oil & Gas Co. has a rig up on the John C. Johnson farm. In the same locality, the Aspurin Oil Co. is drilling on the D. Frank Corping farm. In Flemmington district, Taylor County, the McGrady & Hanlan Oil & Gas Co. is starting to drill on the Morrow farm, 11 miles east of Clarksburg on Jerry Run. In Grant district, Pleasants County, the Faith Oil & Gas Co. is drilling No. 4 on the Hammett heirs farm. On Poca River, opposite the mouth of Green Creek, Harper district, Roane County, the Chartiers Oil Co. has completed the rig for a test on the Norma Hynes farm. In Walker district, Wood County, the South Penn Oil Co. has the rig completed for No. 8 on the George F. Albright farm. The Congden-Woodhard Oil Co. is drilling No. 12 on the Elgie Grant farm. In Union district, Ritchie County, the Pittsburgh & West Virginia Gas Co. has rigs completed for tests on the Lewis Garrison and A. H. McGill farms.

In Paw Paw district, Marion County, the Owens Bottle & Machine Co. has started to drill tests on the J. A. Snyder and A. N. Amos farms. In Ten Mile district, Harrison County, the Clarksburg Light & Heat Co. has started to drill on the Mary Bramer farm. In McClelland district, Doddridge County, Verner Brothers have started to drill on the Isaac Hutson farm. The Washington Gas Co. has shut down at 2,374 feet at its test on the E. D. Fitro farm in Coal district, Harrison County.

Southwest Pennsylvania

In Center Township, Green County, the Natural Gas Co. of West Virginia has completed a test on the Samuel Smith farm good for 25 bbls. a day in the Gordon sand. In the same township the Manufacturers Light & Heat Co. has a duster in all sands at a test on the Viola Stockdale farm. In Richhill Township, the same company's second test on the Samuel and W. J. Booher farm is a gasser in the Gordon sand.

In Canton Township, Washington County, the E. J. Young Gas Co. has completed a test on the C. L. Taggart farm. It is a gasser estimated to be good for 1,000,000 feet.

Near Midway, Washington County, in the vicinity of where the Cowden Oil Co. completed a producer on the I. L. Cowden farm a few weeks ago, there is some new work under way. Dallmyer and others are drilling a test on the G.

RESPONSIVE POWER
FOR THE DAY'S WORK

The power shovel or the industrial crane —each requires a sure responsive power plant to do the day's work.

The contractor and the manufacturer have found that the flexible, dependable power of Continental Motors is a great aid to production and profits. Results have shown that Continental Motors give unusual service at low cost over long periods of time.

Put Your Power Problems Up to "Power Headquarters"

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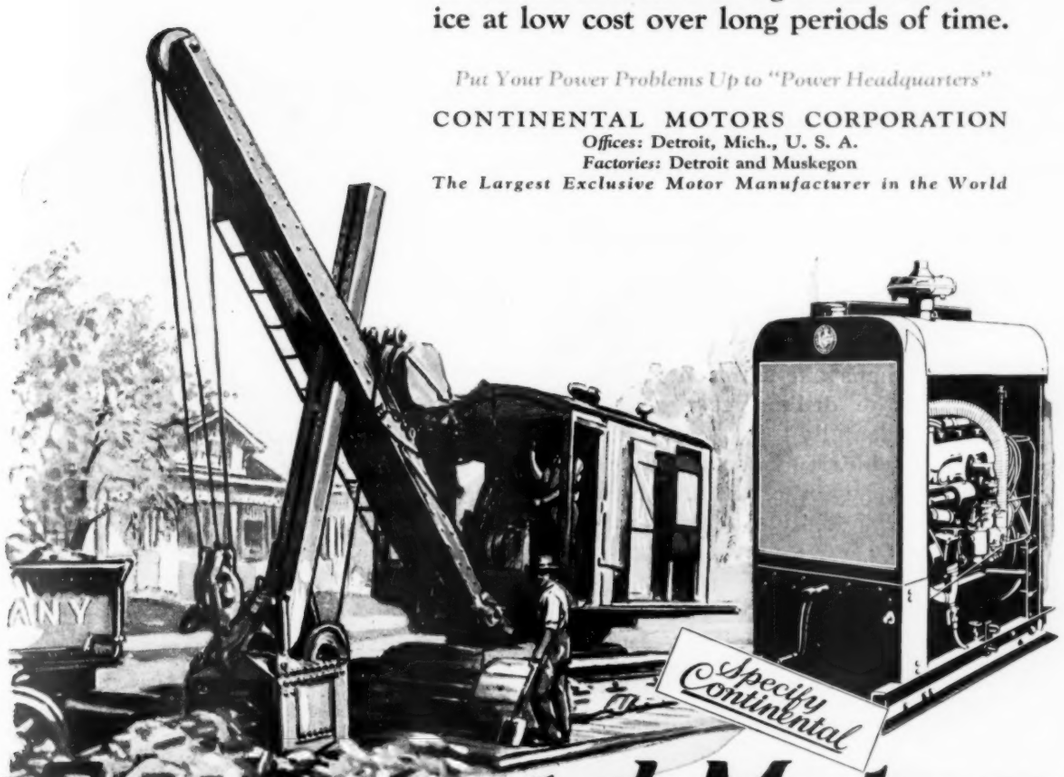
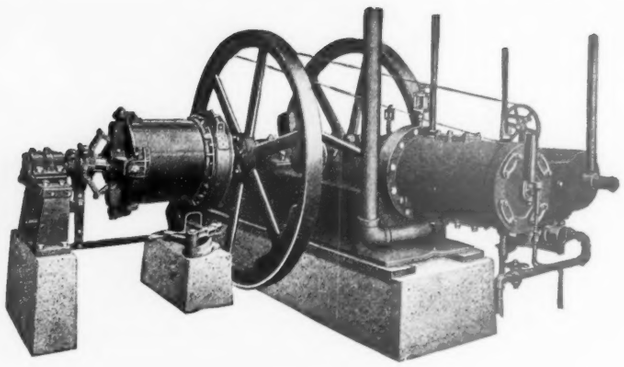
The Largest Exclusive Motor Manufacturer in the World



Continental Motors

Dependable Power for Every Purpose



6513 feet at 3.3 cents per foot

YOU can save money by using a Reid Drilling Engine. Here's a report of one drilling in the Bradford, Pennsylvania, field.

Four wells were drilled, averaging 1628¼ feet depth, a total depth of 6513 feet.

The total fuel bill was $215.15, gas costing 65 cents per thousand feet.

Then:—

$$\frac{\$215.15}{6513 \text{ ft.}} = .033, \text{ cost per ft.}$$

Lubricating oil and repair cost were very small, adding perhaps one-half cent a foot to the drilling cost, and, incidentally this wasn't a new engine. It had previously drilled many other wells, and will undoubtedly drill many more.

These reports are not quoted as "records." Instead they are given to show the high average performance of Reid Drilling Engines. *We will be glad to give you further information on their work.*

JOSEPH REID GAS ENGINE COMPANY

OIL CITY, PENNSYLVANIA, U. S. A.

BRANCHES AND AGENCIES — Marietta, Ohio; Logan, Ohio; Newark, Ohio; Shreveport, La.; Charleston, W. Va.; R. B. Moore, Bolivar, N. Y.; Frick & Lindsay Co., Bradford, Pa., and Kentucky Distributors; S. R. Shoup, 724 Board of Trade Bldg., Los Angeles, Cal.; Frick-Reid Supply Company, Tulsa, Oklahoma, and Branches, Distributors for Oklahoma, Kansas, Texas, Arkansas and Wyoming.

EXPORT SALES REPRESENTATIVE—Oilfield Equipment Co., Inc., 30 Church St., New York City.

BRANCH SHOP—TULSA, OKLAHOMA

Shaffer farm. The Peoples Natural Gas Co. is drilling at 1,900 feet on the Dowler farm and the Stock company is drilling at 1,600 feet on the Pittsburgh Coal Co.'s property. In addition to these wells several more locations have been made on adjacent farms.

In Moon Township, Allegheny County, the Link Oil & Gas Co. has completed in the Gordon sand a test on the Edward Link farm. It is a light gasser in the lower formation.

In North Strabane Township, Washington County, E. E. Robertson has completed a test on the E. K. Lewis farm. It is good for 5 bbls. a day in the Gantz sand. In Gilmore Township, Greene County, J. I. Eddy & Co. have drilled a test on the J. B. Smith farm through the Bayard sand. It is a duster in all sands. In Perry Township, the Carnegie Natural Gas Co. has a Big Injun sand gasser at a test on the Morgan Wade farm.

CENTRAL WEST FIELD

(Continued from Page 66)

ship, same county. This well was drilled to a total depth of 1,700 feet and was dry. The Geiger Pool, in Veale Township, usually finds its best pay sand at from 960 to 1,004 feet.

The other test was made by Neal and others, 1,000 feet from the north line and 400 feet from the west line of the D. K. Morgan farm, in the southeast quarter of Section 27, Veale Township, Daviess County, which was also found dry at a depth of 1,690 feet. This well is about 2 miles southeast of the Geiger Pool and nearly 3 miles south of Veale and 3 miles east of the hamlet of Veale and 4 miles west of the West Fork of the White River.

Illinois

But few completions were reported from any section of Illinois, as the continuous heavy rains caused the shutting down of most drilling wells, although a few started up toward the close of the week. There is a little revival in the Friendsville Township, area of Wabash County. Several years ago a test was drilled in the northwest corner of the Edward Hartwick 160 acres, in the northeast quarter of Section 25, Friendsville Township, that had only a fair showing of oil and now a rig is under construction for another test two locations east of the old hole and along the north end of the farm, which is a mile west and a quarter mile south of the discovery well on the Bass farm, that caused the late excitement. With the completion of this derrick, another will be constructed for No. 3 on the J. O. Wood farm, Section 19, just southeast from the town of Friendsville. Farther north and west of Orio, a rig has been completed for a test on the V. E. Tanguary farm, Section 31, same township, and tools are being moved to the lease to start spudding. In the same township, just east a short distance from Friendsville, Joe S. Young, Jr., and others drilled a dry hole on the John Goodhart 40, acres, in the SE NE, Section 24, about one-half mile northwest of the Bass farm discovery well. It was drilled to a total depth of 1,590 feet. Another well which is No. 3 on the H. C. Yelton farm, in the SW Section 5, and north of the old Wright Pool, drilled by W. M. Bell and others is reported a duster at a total depth of around 1,500 feet.

Allendale Field

In the Allendale Field, of Wabash Township, Wabash County, quite a surprise was caused when the gas well on the Edward Armstrong farm, in Section 7, was drilled deeper and found the regular pay sand around 1,400 feet making an excellent showing and has all the earmarks of a century starter. The Gher farm well drilled a week or so ago, in Section 6, and the closest producer to the Wabash River has brought about a more active drilling campaign eastward from previous production. Joe S. Young, Jr., and others will drill on the Kate Keyser farm, just west of the Gher well; the Adams Corner Oil Co. is starting No. 9 on the Mack Madden farm, south of the Gher well, while Leighty, Price and others are making preparation to start at once a well on the Gher 25 acres, just north of the Gher producer and an offset to that well. Charles Oldendorf and others are drilling No. 4 on the Leek farm, within defined limits of the Allendale Pool. In the southern portion of Wabash Township, W. C. McBride, Inc., drilled in No. 5 well, 5,550 feet from the south line and 50 feet from the east line of the J. H. Cisil farm, Section 24, and struck a 6-bbl. producer in the shallow Bridgeport sand at a depth of 1,163 feet, or 12 feet in the sand which was topped at 1,151 feet. In the same section, J. W. Whiteside and others' No. 3 well, 1,000 feet from the north line and 400 feet from the east line of the C. E. Courter farm, in the SW of the section, proved dry at a total depth of 1,509 feet.

In Honey Creek Township, Crawford County, L. C. McDowell and others' No. 5 in the northwest corner of the Oliver Lawrence farm, in the southeast quarter of Section 7, pumped 16 bbls. initial at a depth of 992 feet. In Oblong Township, the Mahutska Oil Co.'s No. 13 well, 500 feet from the south line and 200 feet from the east line of the Phil Miller farm, in the SE NE of Section 15, was a duster. McNally and Starr drilled a 1-bbl. producer in their No. 6 well, 500 feet from the south line and 1,320 feet from the west line of the A. E. Joseph farm, in the SE SW of Section 23, Prairie Township, same county.

In Casey Township, Clark County, the Ohio Oil Co. is nearing the pay sand with No. 7 on the J. Y. Smith farm, Section 23. W. C. McBride, Inc., is also nearing the completion of No. 25 on the James Rush farm, Section 26, while C. L. Palmer is nearing sand at No. 10 on the George Smith farm, Section 13. In Wabash Township, Albon and others are working at their wildcat venture on the Hodson farm, Section 17.

Holmes and others are drilling a test on the J. Kelley farm, Section 18, Crooked Creek Township, Cumberland County.

Michigan

The new field at Saginaw, Mich., is not one of the boom kind, but moves along slowly with around 25 strings of tools running and has yet to have one dry hole found within the defined limit which is close to 2 miles east and west and approximately a mile north and south as of all the five dry holes drilled none was closer than half a mile from the outer edge production. The daily production grows gradually and gushers are unknown which makes the field better thought of in a way, for the operators do not go to extremes as is the case usually in an area where big wells are found, then again lease prices are nothing to compare with fields where even one big well is found. Even within lines of development work, leases bring no price to speak of.

The Saginaw Field for June produced 3,000 bbls. of crude and during July increased to 5,000 bbls., showing a production from January 1 to the close of July of 22,000 bbls., and growing gradually. There are at least half a dozen producing wells that are not yet marketing oil but will in a short time, as the Sun Oil Co., which takes the bulk of the crude in the field, is constructing a 2,500-bbl. storage tank along the Pere Marquette Railroad and will ship the crude to the company's refinery at Toledo, Ohio.

Undoubtedly the best well completed so far in the Saginaw Field, is the Saginaw Prospecting Co.'s No. 1 on the August Kruke 20 acres, in the north half of the southeast quarter of the southwest quarter of Section 11, Saginaw Township, and across the road from the Sun Oil Co.'s wells on the Weiss and Nuerminger farms, which was reported a completed well last week and estimated and reported at 20 bbls., but according to advice has averaged 40 bbls. daily since connected to tankage.

Three completions are reported for the week in review, making 27 producing wells for the field. The twenty-fifth well was that of Myron E. Lee in No. 1 on the J. Conrad Brachtelsbauer lease on the Shattuck Road, a short distance east of the Hermansau Road, in Carrollton

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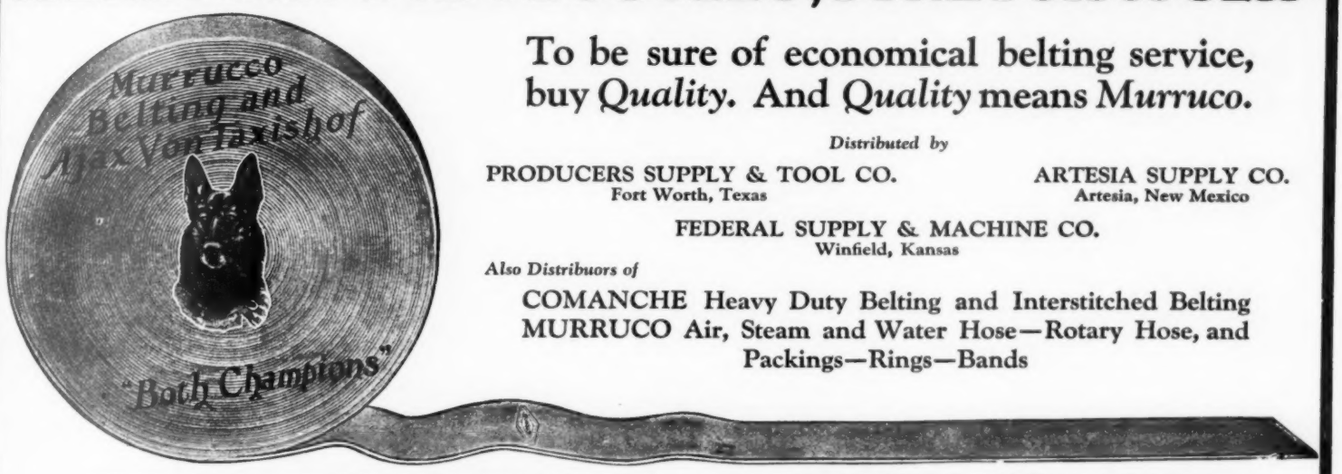

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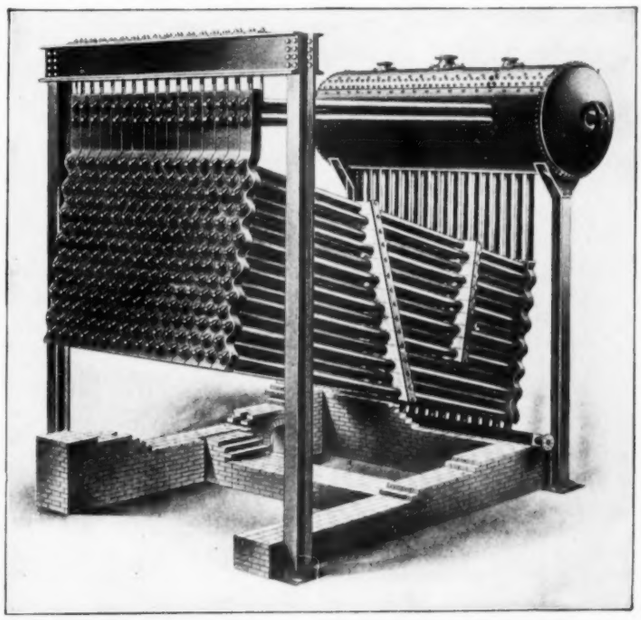

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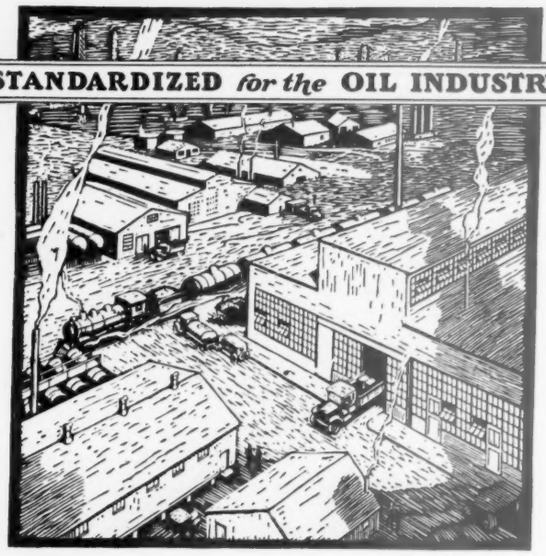

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Township. This well is a slight extension of territory to the northeast, and is about a quarter of a mile away from the nearest production, the Ohio Oil Co.'s well on Mershon-Eddy-Parker lands, and the Bliss Petroleum Co.'s No. 2 on the Casper Ulrich farm. The Lee well topped the Berea sand at 1,817 feet, close in line with others in the locality and was drilled 16 feet into the sand with a good showing of oil, and estimated around 20 bbls. after given a shot and allowed to stand for a short time. This is Lee's first venture in the field, and he announces that another will be rigged up as soon as the No. 1 is cleaned out and put on the pump.

Shallow Well

The twenty-sixth completion was that of the Valley Oil & Gas Co. 'n No. 1 on the Charles Priess lease, near Michigan Avenue and Madison Street, also in Carrollton Township, which struck the top of the Berea at 1,811 feet and drilled 16 feet in the sand and given a shot with 60 quarts. The depth of the well, among the shallowest in the field, was regarded as a favorable sign and considerable oil was bailed from the hole during the drilling in; likewise there was a nice showing of gas. The new well adds comparatively little to the proved territory of the field, though it does represent some extension to the northeast, being only slightly off a line from the Ohio Oil Co.'s producer on the Mershon-Eddy-Parker lease a few hundred feet to the south, and the new Lee well at Hermansau and Shattuck Roads.

The twenty-seventh producer was brought in by the Saginaw Prospecting Co. in its No. 1 on the Fred Remer property, near Hermansau and Shattuck Roads, and is this company's thirteenth producer in the field. The well made a very favorable showing before given a shot after which it produced a strong flow of gas. The shot also helped open up the oil sources as after standing but 12 hours it bailed 35 bbls. This well is in well defined territory being only a short distance from the company's well on the Hanson property. Berea sand was topped at 1,812 feet and drilled 19 feet in the sand. Being drilled somewhat deeper in the Berea than most of the wells in the field and given a heavier shot, makes the operators believe that drilling deeper into the sand and a heavier shot, will make larger initial producers from the wells.

Two additional wells are due for completions, the Sun Oil Co.'s No. 1 on the Ferdinand Steltzriede farm, in the southwest quarter of the northeast quarter of Section 11, Saginaw Township, and about one-half mile north of its No. 1 on the Weiss farm, and Vorhees & McNally's No. 1 on the Charles Ulrich farm, on the Hermansau and Shattuck Roads.

Charles P. Brandt, the well known Indianapolis operator, is experiencing much bad luck with his No. 1 on the Thomas Walker property at Madison and Deindorfer Streets, as the tools got stuck in the hole at the 650-foot depth and he has been obliged to skid the rig and start a new hole. The same trouble was experienced by Myron E. Lee who is drilling the test for the Saginaw City Building Co. on the E. E. Householder farm, in the southwest corner of the northwest quarter of Section 12, Carrollton Township, and half a mile northeast of the Sun Oil Co.'s Weiss farm producer and the farthest test drilling to the northeast of the present defined territory. This well has been fishing for several weeks for a couple strings of tools lost in the hole at around 670 feet and will skid the rig and start a new hole. Should this well when completed show production worth while, it will make quite an extension to the field to the northeast, being located one-half mile east and a mile south of the dry hole drilled by the Bliss Petroleum Co. on the Carl Boldebuck farm.

New Operations

The Saval Development Co. is drilling its No. 1 on the Weiss property near the northeast corner of Weiss & Hermansau Roads. The Fordney Petroleum Co. is reported rigging up for No. 1 on the Joseph Bisner property, north of Charles Street near Weiss Street, in Carrollton Township. Saginaw Prospecting Co. is moving a rig to the L. W. Bixby property on Banjamine Street near Weiss Street. The Sun Oil Co. has spudded in its No. 1 on the William Scherzer 10 acres, in Section 11, Saginaw Township, and north and a little west of its producer on the Nuerminger farm, also spudded No. 3 on the John Schoenheit farm, same section. Mathew Heppler and others are starting No. 1 on the Mrs. Caroline Heppler property on the Shattuck Road west of the Hermansau Road. The Bliss Petroleum Co. is rigging up for its No. 4 on the Casper Ulrich farm, Section 14. The Saval Development Co. is drilling its second well on the Spatz property near Hermansau Road and Weiss Street.

The wildcat well of the Brown City Prospecting Co. on the Roger farm, in Section 6, in the northwest corner of Frankenmuth Township, Saginaw County, on the King Road, 6 miles east of the Dixie Highway, 5 miles east and over a mile south of Saginaw and about 4 miles northeast of Bridgeport, failed to find any showing of oil in the Berea sand which was found at a reported depth of 1,792 feet and at 1,827 feet water was encountered and the bottom of what is thought to be the Berea sand was reached at a depth of 1,884 feet, where blue shale was entered by the drill. The owners plan to case off the water in the Berea and continue drilling in the hope that there may be oil in the next sand encountered which should be the Saginaw sand.

Leasing of lands in all parts of Saginaw County continues and a few dry holes outside of the present producing area do not dampen the prospects of finding an extension in some direction.

The Saginaw Prospecting Co. is rigging up for its test about 2 miles out of Midland, the county seat of Midland County, to the northwest of Saginaw County where it holds a large acreage of prospective territory.

The Wells-Schmidt Co. is starting a well on the Whittier Mill property at Oak and Pine Streets, in Saginaw.

KENTUCKY-TENNESSEE

(Continued from Page 64)

Another important wildcat venture in the western division is that being made by P. A. Evans of Louisville, Ky., and B. A. Evans of Dallas, Tex., both formerly of Owensboro, Ky., and they are drilling a well on land they own amounting to several hundred acres as well as a large acreage under lease, in Butler County, which joins Ohio County to the southeast and Warren County to the northwest. The pipeline of the Indian Refining Co. passes through some of the Evans property and if oil is found there will be a ready market for it. Geologists have made very optimistic reports on the possibilities of oil in Butler County. P. A. Evans is president of the Big Ten Oil Co.

Other wildcats attracting attention are in Grayson County east of Ohio County, and northeast of Butler County, in the vicinity of Leitchfield. W. and S. Chenault are drilling one on the George Kenser farm, 1½ miles south of Leitchfield; Robinson and others are drilling on the Carville farm, 2 miles from the test on the Kenser farm, while this same firm has a test drilling on the Jones farm, 6 miles south of Leitchfield. Two tests are being made in Clinton County, in the Lillydale area, near the Tennessee line. One is owned by Owens, Long and others on the Jane Scott farm, and the other by Delaney & Ewings on the Shipley heirs' farm.

Week's Work Summarized

A summary of the week's work in the Kentucky Field shows 30 completions, 23 producers with an initial production of 235 bbls., 5 dry holes and 2 gas wells. Compared with the previous week, there were 4 less completions, 2 less producers, 20 bbls. less production, 3 less dry holes and 1 more gas well. The wells were

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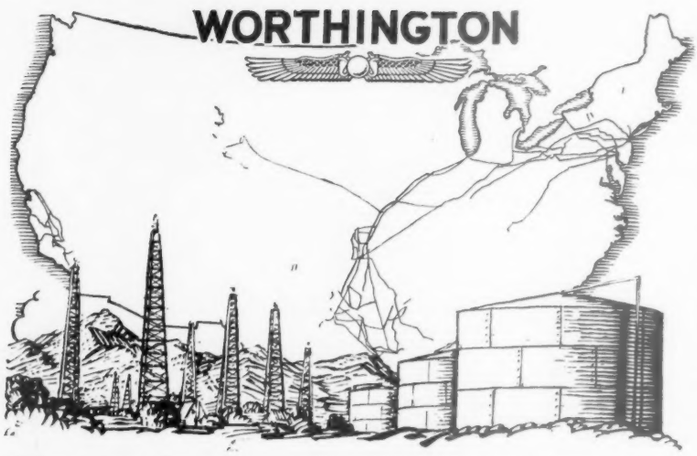

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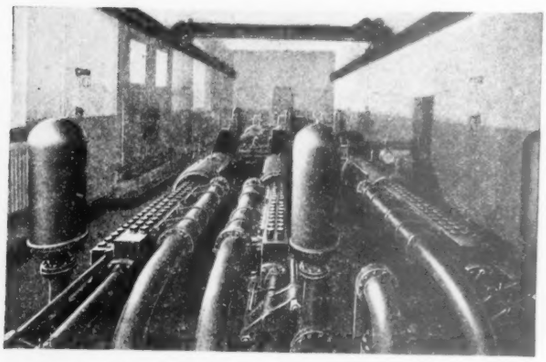

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Owensboro dist.	3	3	40	0	0
Estill	2	2	22	0	0
Lawrence-Johnson	2	2	9	0	0
Allen	2	0	0	2	0
Floyd-Knott	1	1	4	0	0
Greenup	1	0	0	0	1
Lee-Owsley	1	0	0	0	1
Morgan	1	0	0	1	0
Total	30	23	235	5	2
Last week	34	25	255	8	1
Difference	4	2	20	3	1

Kentucky's Production

According to figures compiled the production of crude oil in Kentucky during June is given at 526,800 bbls., or a daily average of 17,560 bbls. For July, the production was 550,200 bbls., or a daily average of 17,748 bbls. The production from January 1, to July totaled 3,632,200 bbls., for the same period in 1925, a decrease of 406,000 bbls.

Tennessee production in June totaled 4,200 bbls., or a daily average of 140 bbls., and July's production totaled 2,800 bbls., or a daily average of 90 bbls. The total production from January 1 to July, 1926, totaled 25,800 bbls., against 7,600 bbls., for the same period of 1925, a gain of 18,200 bbls.

Western Division

The work in the Owensboro district and the Glasgow Field of Barren County is far in the lead in development work in the western division and it looks as though the Owensboro end would soon take the lead as numerous large operating concerns have entered for active development work. Whether Butler and Grayson Counties enter the list of producing counties will shortly be known by the test now under way. The bringing in of a commercial producer in Christian County would mean much for the southwestern part of the state and would bring about new work in both Todd and Simpson Counties that lie along the Tennessee border. Allen and Warren Counties are both very quiet at this time, few new tests are being started and there is a lack of completions as well.

Barren County

Barren County continues its active development owing to its shallow pay sands and good staying production, but the county is getting pretty well tested in all parts and it will not be long until pastures more green will have to be sought by the operator.

In the Lecta Pool, a few miles southeast from Glasgow, the Esslinger Oil Co. has drilled in Nos. 11, 12 and 13 on the C. B. Jones farm, upon which the discovery well of this rich pool was found. Their production are given as 20, 20 and 30 bbls., respectively, with No. 14 about due for completion. Merrifield and Hedges are drilling a well on the Dean lease at the edge of the pool.

On the Rocky Hill Road, Sanson, Warner and others are trying to exhaust the heavy body of salt water encountered in a test on the Petty farm, at a depth of 296 feet, and 3-inch tubing is used in hopes of getting the best of the water which is nicely colored with oil. No. 1, of this company on the Kinslow farm, is dry at 220 feet.

In the Lecta Pool, Coombs and others' No. 3, on the Grady farm, is estimated at 12 bbls., while Baird & DeCaigney's second well on the Dean farm, is showing for 15 bbls. initial.

The Star Oil & Gas Co.'s No. 11, on the Richardson farm, in the Knob Road Pool, is rated at 10 bbls., while the R. B. Tyler Co.'s Nos. 9 and 10, on the White farm, are reported at 5 and 10 bbls. initial production.

T. L. Gorby's No. 3, on the Lessenberry farm, in the Gorby Pool, is good for 3 bbls. initial production.

In the Emery-Moore Pool, T. L. Gorby has a duster in his No. 8 on the W. E. Steffey farm, Fred C. Moore has an 8-bbl. initial well in No. 14 on the Travis farm, and due to complete No. 15 same farm, while his No. 12 Howard farm, is estimated at 3 bbls.

In the Hall Baker Pool, the Consolidated Gas Co.'s No. 40 on the H. W. Duff farm, is reported at 12 bbls. initial at 481 feet. Wood Oil Co.'s No. 7 Redman estimated at 5 bbls. R. A. Stohr's No. 1 McGuire, shows for 5 bbls. at 510 feet and L. W. Preston's No. 1 Pace farm, 3 bbls. at 614 feet.

Owensboro District

Only three completions are reported from the Owensboro District where there has been so much continued rains for the past week or so, putting the roads in such shape that supplies cannot be hauled over them. The best well of the week in this area was the Butte Dredging Co.'s No. 3 on the Allie Evans 104 acres, with an initial production of 25 bbls., from the Jett sand. The Rex-Pyramid Oil Co.'s initial venture on the Ambrose farm, an offset to the east of the Ohio Oil Co.'s test on the Ambrose farm, is estimated at 10 bbls. This development is miles away from former production and it looks like a new and interesting extension would develop. Clarence A. Leeper's No. 5 on the H. D. Brown 205 acres, located 600 feet west of No. 4 same farm, has been completed to the Barlow sand and reported good for 5 bbls. No oil was found in the Jett sand in this well.

The White Plains Oil & Gas Co.'s No. 7 on the J. J. Midkiff farm, in the Midkiff Pool, found 16 feet of Barlow sand and has an excellent showing, but its value will not be known until connected to tankage and allowed to pump. This company is drilling a test on the Ira Howard 216 acres a little in advance of production.

Drilling to Barlow

The Penn-Indiana Oil Syndicate's No. 4 on the C. A. Kelly 260 acres and 400 feet south of No. 3, same farm, failed to find a pay in the stray sand and is drilling for the Barlow sand. Same company is drilling a second test on the Simpson heirs farm of 126 acres and a test on the B. D. Spurrier 50 acres. No. 7 is also drilling on the R. B. Powers 100 acres, in the Powers Pool and 400 feet east of No. 5, same farm. Same company is drilling No. 9 on the Laura Mercer 84 acres, and starting No. 10 same farm.

The Spice Knob Oil Co. is starting No. 7 on the Bert Thompson 40 acres, 400 feet west of No. 6, same farm. D. J. White is drilling a test on the O. D. Burdette farm, which is an offset to a producer recently brought in on the McDaniel land. The Vielon Oil Co. is starting No. 12 in the center of the O. T. Burdette 35 acres. The Ohio Oil Co. is drilling No. 1 on the C. Banham 20 acres. Clarence A. Leeper is drilling a second well on the W. A. Probus 37 acres and 600 feet west of No. 1, same farm. Chicago Petroleum Syndicate is drilling No. 2 on the Nannie J. Brown 30 acres, and No. 9 on the Guenther-Gant 134 acres, in the Swope Pool. Petroleum Extraction Co. is working at a second test on the Kirk & Woodward farm. Security Oil Co. is drilling No. 2 on the J. W. McDaniel 66 acres. C. A. Leeper is starting a test in the center of the east line of the John Raymond farm, south of the creek. The Ohio Oil Co. is drilling a test on the Daby farm, one-half mile northeast of Pleasant Ridge, also drilling a test on the Lonzo Crowe 50 acres, offsetting its No. 1 on the Ellis-Helpin farm to the east. Ellis & Courson are drilling No. 1 on the A. Martin 50 acres, and the Wood Oil Co. is drilling No. 2 on the J. U. Bartley 139 acres, 350 feet north of No. 1 same farm.

Two Dry Holes

Two dry holes are reported from the Scottsville Field of Allen County. Stinson, Morrow and others' No. 5 Dora B. Corbitt farm, proved a duster at 450 feet, while Steubenrach and others' No. 5 E. Morehead farm, was dry at 267 feet. Mrs. John McAlpine is drilling No. 10 on the Warren Reynolds farm, and A. Davis' No. 5 on the W. M. Dodson farm.

In Warren County, Bowling Green Field, the Petroleum Exploration Co. made a location for No. 5 on the Temp Bailey farm, and E. H. Fuller is drilling No. 2 on the Cooper Moregan farm.

Eastern Division

Few completions are reported from the eastern division of Kentucky, the best being reported from the Irvine Field of Estill County, where in District 8, the Wood Oil Co.'s No. 11 William Neal

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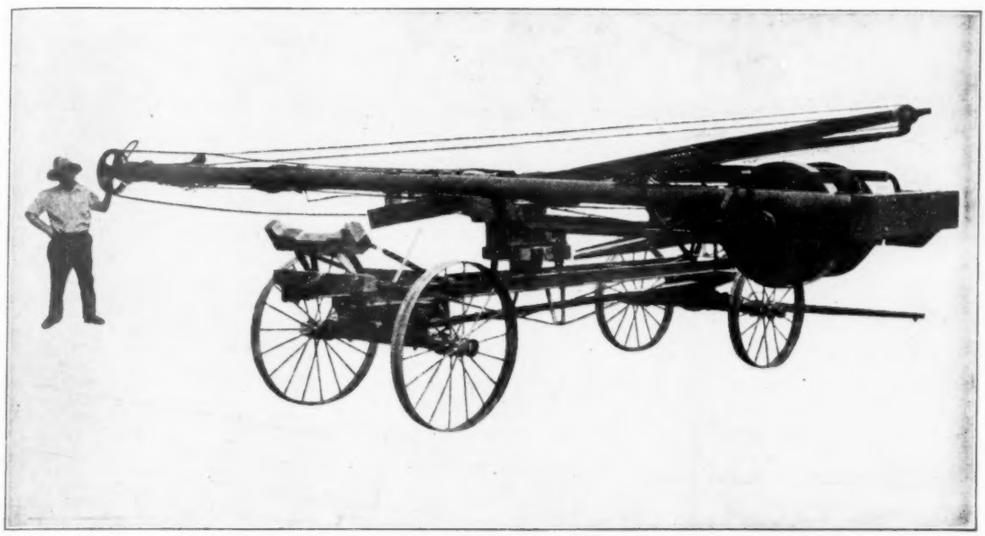
In the picture the operator has swung the heavy machine away from its bunk rests and is ready to place it at the well.



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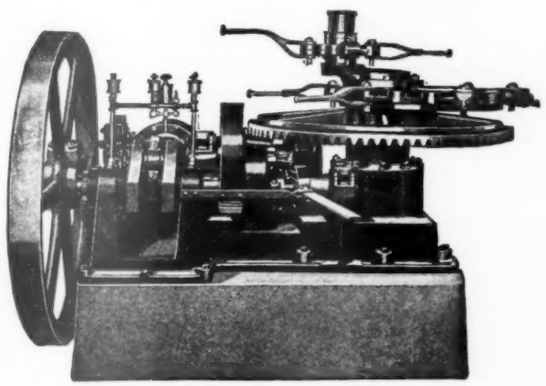

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farm, is reported good for 12 bbls. and the Reno Oil Co.'s No. 8 Millard Ballard farm, for 10 bbls.

In the North Weir Field of Lawrence-Johnson Counties, in District 22, the Swiss Oil Corp.'s No. 10 on the R. N. Sparks farm, is good for 5 bbls. and No. 22 on the J. M. Fyffe farm, District 33, good for 5 bbls.

In Greenup County, the Petroleum Exploration Co. is reported to have brought in a commercial gas well on the J. H. Flannery farm, also a gas well in District 18 B., in Lee-Owsley Counties on, the J. B. Scott farm, that showed a volume of 2,104,000 feet.

In District 21, Floyd-Knott Counties, the Ivyton Oil & Gas Co., has what is reported a 4-bbl. pumper at a test on the Andy Coburn farm.

In District 6, Morgan County, the Petroleum Exploration Co.'s test on the Craney Creek Dome, developed in a real duster.

PROPER MAINTENANCE OF WIRE ROPE EXPLAINED

(Continued from Page 78)

prevent loosening some of the strands. This care will prevent the largest part of high stranded lines. Use a soft annealed iron wire about No. 16 gauge (.063-inch diameter) and place three tie wires of about five or six turns each on each side of the cut.

5. Take care in socketing your rope as many are spoiled in this process.

6. Don't use soft rope, wire or babbitt in setting sockets.

7. Don't slip a new line for the first 1,500 feet. You'll get longer life out of your rope if you break it in easier.

8. If you intend to slip the clamps don't pull square over the edge of the clamps.

9. Don't let tools get away and have to grab them with clamps so you can see the smoke coming from the line.

10. Don't forget to oil your rope thoroughly when you respool. You may lose your rope on the next week by having a rotted core if you don't.

11. Be sure your crown blocks are not worn down so as to pinch a new

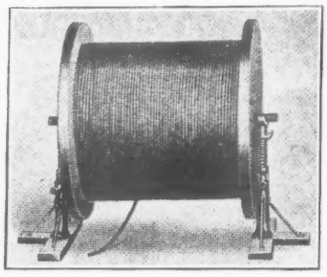

Plate No. 2-A. Jackbrackets provide the best possible means for unreeling wire rope. With this equipment there is little possibility for kinking.

rope. The block is cheaper than a new line or a fishing job. You may spoil an absolutely new line in a few towers with worn out blocks.

12. Don't use four pieces of wood to keep spooling flanges in place as this causes dog legs resulting in spot wear.

13. Don't use a swivel socket that has a habit of sticking.

14. Don't make your line reach too far by giving it more motion.

15. Don't tight hitch (only when absolutely necessary).

16. Don't flag through the center of the rope when swabbing (when flagging through rope for swabbing use smallest flag possible, so as not to open strands too far when putting in flag.)

17. Don't drop bailer in hole without slowing down, for fluid, if any, as this will pop the sand line core.

There is no business or industry that lowered its production costs to the irreducible minimum, and until this has been done, the greatest amount of profit cannot be realized. Reduction of operating costs rests as much, if not more, in the smaller details, as it does in the major items of equipment. No superintendent ever contracts for a large investment without serious consideration. This is as it should be, but there are some who do not give proportional consideration to the minor items of equipment, notwithstanding that in the aggregate they represent a far greater investment than the larger single items. Only by paying constant attention to the little things can we hope to write larger figures on the right side of the ledger at the end of the year.

Atlantic Receipts During August Less Than During July

By N. O. Fanning

NEW YORK, Sept. 13.—Receipts of crude and refined oil at Atlantic Coast ports by water during the month of August are estimated at 15,429,000 bbls., a daily average of 498,000 bbls., compared with 17,798,000 bbls., or 577,000 bbls. daily, in July, and with 13,552,000 bbls., of 435,000 bbls. a day, in August, 1925.

Comparing the August figures with those of July, the preceding month, reveals a decline in receipts from all principal sources except South America. Imports from the latter continent in August totaled 1,449,000 bbls. (including Trinidad), a daily average of 46,000 bbls., whereas in July, the total was 1,081,000 bbls., or 36,000 bbls. daily. The August imports from South America established a high record.

At the same time, imports from Mexico fell off considerably, totaling in August 2,172,000 bbls., a daily average of 71,000, against 3,571,000 bbls., or 115,000 bbls. a day, in July.

Receipts from the Gulf Coast in August aggregated 9,917,000 bbls., or 320,000 bbls. daily, against 11,158,000 bbls. in July, a daily average of 360,000 bbls. Losses in receipts were recorded from the Baton Rouge and Houston districts, while the Port Arthur district contributed a slight increase to the quota.

The Pacific Coast supplied the Atlantic Seaboard with 1,891,000 bbls. of oil in August, or only 442,000 bbls. more than South American oil countries. In July receipts from the Pacific totaled 1,988,000 bbls.

The following tables show total and daily average receipts of crude and refined oil at Atlantic Coast ports for August, 1926, July, 1926, and August, 1925, (in barrels):

	Aug. '26	July '26	Aug. '25
Total Receipts			
Baton Rouge, N. Orleans	2,482,000	3,254,000	2,629,000
Pt. Arthur, Sabine, Beaumont	3,868,000	3,853,000	3,075,000
Texas City, Houston and Galveston	3,567,000	4,069,000	3,339,000
Gulf Coast	9,917,000	11,176,000	9,043,000
Pac. Coast	1,891,000	1,988,000	1,669,000
Mexico	2,172,000	3,571,000	2,457,000
So. Amer.	1,449,000	1,081,000	383,000
Total	15,429,000	17,816,000	13,552,000
Daily Average			
Baton Rouge, N. Orleans	81,000	104,000	85,000
Pt. Arthur, Sabine, Beaumont	124,000	124,000	98,000
Texas City, Houston and Galveston	115,000	132,000	108,000
Gulf Coast	320,000	360,000	291,000
Pac. Coast	61,000	66,000	54,000
Mexico	71,000	115,000	78,000
So. Amer.	46,000	36,000	12,000
Total	498,000	577,000	435,000

The belief is expressed in authoritative quarters that there will be a substantial increase in receipts from the Pacific Coast during September, due to the fact that Atlantic Coast refiners find California at present the cheapest market for kerosene, fuel oil and other heavy products.

SWEDISH OIL FIELD

According to a message from Stockholm, several members of the Swedish Government have visited the new oil fields near Skelleftea, in Norrland. Interviewed, the Minister of Commerce declared that there are much greater possibilities than the members of the Government ever expected.

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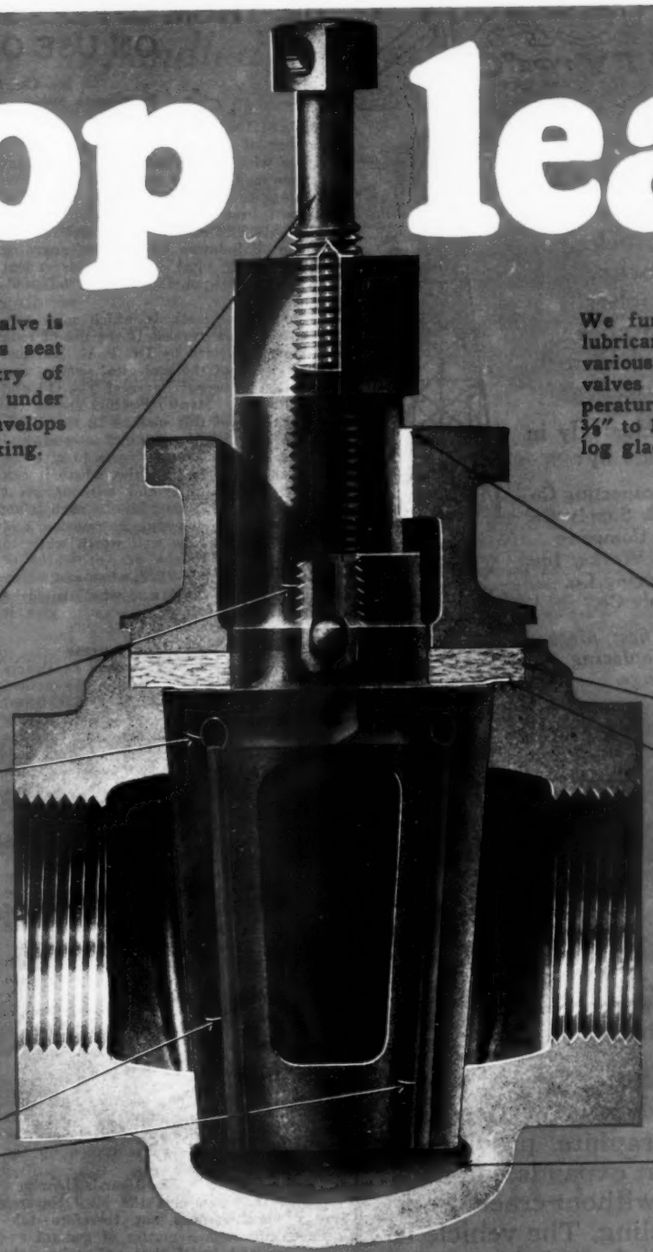

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DR. THOM OFFERS SOUND ADVICE ON USE OF SODA ASH METHOD

By Charles E. Kern
Washington Bureau, The Oil and Gas Journal

WASHINGTON, D. C., Sept. 11.—A number of the Government experts familiar with the oil industry, believe that science may be able to extend our recoverable petroleum resources several fold without prohibitively increasing production costs, and can aid in the stabilization of the oil industry and the safeguarding of the many vital industries dependent upon oil and upon the price of oil products.

Among the methods which may contribute to this increase is the use of soda flooding suggested by Dr. P. G. Nutting, geophysicist of the geological survey, and described in recent issues of The Oil and Gas Journal. Many operators are watching the use of this method in the Bradford Field with the greatest interest, and numbers of them may decide to give the method a trial in localities where it can be tested lawfully, and without great expense. If conducted blindly such trials may fail to yield useful information, and it may therefore be well worth while to redescribe briefly the present status of the soda flooding method, when and where it may be important, and what should be done by operators who wish to give it a trial.

Not Assured of Success

In the first place, it should be clearly understood that the success of the method in the Bradford Fields is as yet hoped for rather than assured, and that it may be at least two years before its success at Bradford can be accurately appraised. That it will succeed is perhaps shown by the behavior of wells in the Salt Creek Field producing from the first Wall Creek sand. The oil in this sand is surrounded by artesian water containing several thousand parts per million of sodium bicarbonate, giving natural condition at least in part similar to those created by the artificial introduction of sodium carbonate into flood water used at Bradford.

Though practically all of the wells in the first Wall Creek sand are now in the pumping stage, it is a matter of quite common experience that new wells drilled just above the edgewater line start off flowing oil at a rate up to 1,000 bbls. per day, and that old pumping wells near the edgewater line begin to flow again at a rapid rate a short time before they go to water, apparently showing that the carbonate edgewater collects a bank of oil ahead of it as it creeps up the flanks of the dome.

In the majority of oil sands, however, salt water surrounds the oil. Natural soda flooding does not therefore take place, and it is a matter of general experience and belief that ordinarily only some 15 to 25 per cent of the oil in such sands is recovered by flowing and pumping, leaving behind a great quantity of oil which requires no hazardous exploration campaign for its discovery, and which may be recoverable with a minimum of expense for new drilling, once the proper method is hit upon to force it to leave the sand and move to the well.

Operating "Low Grade Sands"

In the aggregate billions of barrels of oil will remain in such partially exhausted oil sands after pumping has ceased to be profitable, and other vast quantities undoubtedly exist in sandstones, limestones and oil-soaked shales which have given shows of oil which have never yielded important commercial production due either to the fineness of the pores in which the oil is held or to the high wax content or viscosity of the oil which prevents its rapid and ready flow to the well. In days gone by, low grade copper ores were not a profitable source of copper, whereas now, through scientific progress, they have become a major source of commercial copper. Just so, it may be possible that the saturated or partially saturated beds which have yielded and now yield only traces of oil or unimportant production, may in the future be profitably exploited by some new method, and many an apparently dry hole may, with close scientific study be made to yield handsome profits. The operator who passes up any bed which gives even a show of oil without finding out all he can about its oil content, may realize too late that he has missed a golden opportunity. If deposits in "tight" sands are to be recognized and successfully developed, the coring of oil-bearing beds must become a general practice, and in the long run such cores will pay for themselves many times over by yielding information which will be of the greatest value in the adaptation of new recovery methods to a property, by showing the amount and character of the oil present, its distribution through the sands, and the sand conditions which will control the direction and speed of fluid movements.

The importance of these "low-grade oil ores," once they are profitably exploited, as a stabilizing influence in the oil industry, cannot be overstated, for unlike flush production which may have to be gotten "while the getting is good" regardless of the demand for oil, the oil deposits in sand depleted of their gas pressure, can be blocked out in advance of exploitation, and production from them can be speeded up or retarded, depending upon the state of the crude oil market.

Doctor Thom's Word of Caution

"Operators who decide to try the use of soda flooding," according to Dr. W. T. Thom, Jr., of the Geological Survey, "should first of all ascertain if flooding is permitted by law in their field as a number of state statutes now existing specifically forbid it. And in the second place operators who make a test, should do so with the realization that it is possible that under some conditions the sodium carbonate may be harmful, by causing deposition of lime carbonate; also that it will hardly be worth while to make the experiment unless it is to be done carefully, under the supervision of trained engineers and geologists, and with a carefully planned system for collecting and recording a whole series of facts regarding structural, water and sand conditions in the field and studying these; the character of the oil, the rate of movement of oil, gas and water in various directions through the sand; the rate of yield of oil and water from individual wells both before and after flooding was started, and the rate at which soda solution, of known strength, is being introduced in inlet wells. The structure of both the top and the bottom of the sand needs to be worked out with great care and accuracy, as very slight arches or depressions in the sand surfaces may exercise a notable influence in determining the direction of underground flow.

The thickness, composition, bedding, porosity and saturation of the sand need to be accurately known, requiring careful coring, and study of cores and drill cuttings. The natural distribution of waters and water-soluble salts naturally associated with the oil need to be determined. Also the character of the oil and gas present, and the changes in their character during the life of a well; and the rate and direction of fluid movement through the sand need to be determined: (1) by the use of coloring material, such as fluoresein, which can be added to flood waters, (2) by drawing lines of equal fluid discharge, based upon the production figures for a group of wells; or (3) by applying compressed air to an inlet well and noting the time of its appearance at surrounding outlet wells.

Danger of Reactionary Chemicals

If an oil sand contains considerable amount of magnesium or calcium chloride the tendency of the sodium carbonate to react with these chlorides and plug the pores of the sand may be corrected by starting the flood with plain water, thus

(Continued on Page 126)

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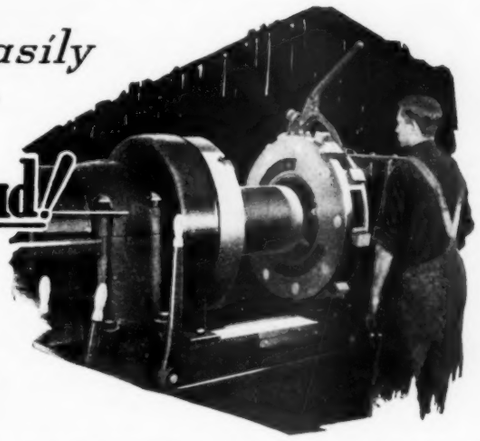

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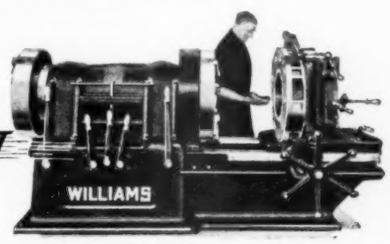

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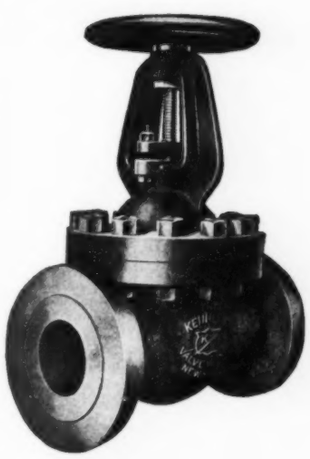

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COMPANIES ROUND OUT OPERATIONS BY INCREASING DIRECT SALES

By L. M. Fanning
New York Bureau, The Oil and Gas Journal, 30 Church Street, New York

A definite trend in the petroleum industry toward more complete company control of sales direct to the consumer has important economic significance.

Virtually all the major oil companies engaged in refining and marketing are operating on the policy of increasing their own filling stations, although in some cases the actual carrying out of the policy at the present time has undergone a considerable slowing up, due to causes related to initial costs.

While some companies launched filling station campaigns in the large consuming centers a year or two ago and greatly increased the number of owned and operated units, there is now noted a modification of the activity to one of gradual, instead of rapid, expansion. Nevertheless, the trend toward company owned and operated station stills exists and is one that, as it develops, will have increasingly important bearing on the stability of gasoline prices.

In the past year or two there has been an impressive gain in the volume of gasoline sales by company filling stations and a proportionate decline in the percentage of the total volume marketed through garages and curb pumps. It is impossible to obtain any statistics confirming this statement, but that it is correct is apparent from a canvass of the marketing operations of the larger companies showing that practically all have increased, and are increasing, the proportion of their direct sales.

More Company Owned

While company-owned filling stations are gaining, the same is true of dealer stations, not owned or operated by the oil companies, but which are under contract with individual companies to handle one company's product exclusively. This method is recognized as having certain advantages, and, at the same time, some serious disadvantages, but its continuance and growth is likely as long as the gasoline volume handled by the larger oil companies so greatly exceeds the amount that can be marketed through their own facilities.

The advantages of company-owned filling stations from an economic point of view, which consideration is largely responsible for the growth of the movement, is that this method provides the nearest approach to an assured outlet for production. It is recognized that some of the largest companies are aiming toward the provision of marketing facilities commensurate with gasoline refining capacity as a logical rounding out of their operations. This is regarded as of nearly as much importance as the assurance of crude oil supplies for refinery operations.

Taking the total number of filling stations, dealer stations, garages and curb pumps now dispensing gasoline, the gasoline marketing end of the oil business is greatly overbuilt. It is recognized that there is a big duplication of expense represented and from this viewpoint the tendency toward more company-owned filling stations would appear to be economically unsound. However, as this situation represents a condition of intense competition, so competition is also responsible for the present tendency.

The drive by competing companies in the same territory resulting in the over-installation of pump equipment has also resulted in uncertainties as to holding gains made in various districts. Stations not owned frequently change hands, pumps of one company are thrown out and pumps of another company installed. As this condition is multiplied it amounts to a major consideration in the tendency toward company-owned and operated stations.

It is further recognized that from an economic angle, as the percentage of direct sales of individual companies increases there will be less gasoline offered in the open market and correspondingly less possibility of price instability. The tankwagon market, which in recent years has meant little if anything, would doubtless exercise a more important function as the movement increased provided there was no serious overproduction of gasoline.

Tightening up Margin

With a tightening up of the margin between f.o.b. refinery price of gasoline and the price to the consumer, which tendency is noted under present conditions of a fairly satisfactry balance between company-owned filling stations would be particularly apparent just now. The reason why some companies have found it necessary to slow up their expansion program is that initial expense in filling station ownership has greatly mounted in the last year or so.

The boom in real estate values throughout the country has particularly affected properties in congested districts. In business and residential districts, corner properties adaptable for filling station purposes, have gone up to the point where any large scale acquisitions such as many companies had planned were considered out of the question. For this reason the policy being pursued is that of gradual acquisition. As a desirable property at a moderate figure becomes available it is taken over.

Several companies have given up any further purchases for the sime bein, but are concentrating on increasing their dealer connections.

Expansion in East

Probably the most active company in the East in expanding its own filling stations is the Standard Oil Co. of New Jersey which markets in New Jersey, Delaware, West Virginia, Maryland, Virginia, North Carolina and South Carolina. Three years ago the New Jersey company did not operate any filling stations and now it is believed the company's stations number 200 or 300. No exact figures are available.

The Standard Oil Co. of New York, marketing gasoline in New York, Connecticut, Rhode Island, Massachusetts, Vermont, New Hampshire and Maine, began about two years ago to go into the filling station field in New York City. It is still increasing the number of filling stations gradually but it is not engaged in any big campaign of expansion. The great bulk of its total gasoline business is done through dealer stations, garages and curb pumps, but the percentage of direct sales is increasing.

The Gulf Refining Company and The Texas Company are increasing the volume of business done directly with the consumer, but the dealer distribution plan is largely followed by these two companies. The Gulf operates service stations in Florida, Georgia, North Carolina, South Carolina, Virginia, Maryland, Pennsylvania, Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, New York, New Jersey, Indiana, Kentucky, Texas, New Mexico, Alabama, Arkansas, Louisiana, Mississippi and Tennessee. Three years ago its stations totaled 141 but there has been considerable increase since that time.

The Texas Company at the last report had some 160 stations which it operated itself, these being located in the following states: Alabama, Arkansas, Colorado, Connecticut, Florida, Georgia, Illinois, Louisiana, Maine, Massachusetts, Mississippi, Missouri, New Hampshire, New Jersey, New Mexico, New York, Oklahoma, Pennsylvania, Rhode Island, South Carolina, Texas and Virginia. The Texas Company is not going into the operation of owned stations on any considerable scale at present. The company's present policy favors leased stations as preferable to company operated

Dealer Station Operations

The Atlantic Refining Co. and the Sun Oil Co. have greatly increased their dealer station operations in Pennsylvania and in the New Jersey, New York and New England districts. The former's

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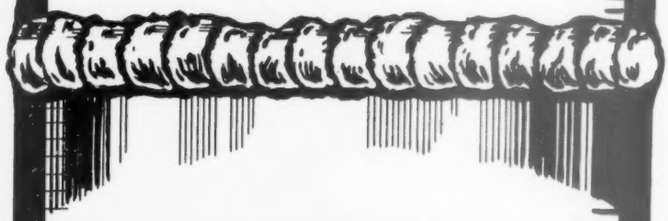

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filling station expansion program which extended well into the New England territory a year or so ago has slowed down somewhat. The Sinclair Refining Co., while retaining its policy of extending its own filling stations, is really concentrating on marketing through dealers. The company has bulk stations and its products are being marketed to the consumer in about 25 states.

The Pan American Petroleum & Transport Co. (Standard of Indiana interests) engaged in a big gasoline retailing campaign in the New York and New England districts last year. The company opened up a large number of its own and dealer stations, but is not doing anything further in the way of expansion in this territory. However, it is engaged in a campaign of complete coverage in Louisiana, Alabama, Tennessee, Florida and Mississippi.

The Tide Water Oil Co. in the New York and New Jersey districts does not operate any of its own stations but sells through dealers and there is no indication of any change in policy.

The Pure Oil Co. now has 262 filling stations, representing a considerable increase in the last two years. It engaged in a big expansion program in New York last year. Of the 45 stations in New York state, about 20 are situated in the metropolitan district of the city, but the company is doing nothing further in this district.

The company has 11 stations in Pennsylvania, 7 in New Jersey 3 in Delaware, 80 in Ohio, 8 in West Virginia, 23 in Indiana, 79 in Minnesota, 2 in Wisconsin, 2 in North Dakota and 2 in the State of Washington. Its largest campaign is now in the Philadelphia district, and it is hooking up the gaps in the eastern territory between present stations in Pennsylvania, New York, Delaware and the New England states.

PETROLIA OIL FIELD HAS 75 PER CENT YET

Consul Fred C. Slater at Sarnia, Ont., commenting on the "oil history" of Ontario, states:

"Petroleum has been produced in the southeastern part of Ontario since 1856 with varying degrees of success. Until about 25 years ago the district flourished because of this industry, but since then the flow has receded until now the production is supposed to have nearly reached the vanishing point, with more than half the wells abandoned. Petrolia, the heart of the oil field, was once a flourishing city of some 7,000 but has now been reduced to about 2,400. At times spurts of enthusiasm would permeate the district over some new find, but proved to be merely side pools of the main field which apparently had not been drained before. Notwithstanding this cessation of the flow of oil, engineers have calculated that only from 10 to 15 per cent of the deposit has been secured, while the Department of Mines and Fisheries has placed it at 25 per cent, leaving 75 per cent still in the ground."

GREEK OIL FOR NAVY

A message from Athens says that experiments with a view to the development of the petroleum resources of Zante have given excellent results. According to the report of the commission appointed by the Ministry of Marine, the petroleum wells in Zante, discovered some time ago, can yield several thousand tons of good oil yearly if properly worked. Experiments carried out on the oil-fired destroyer Pergamos proved that the Zante product is as good as the Rumanian and the Russian. The commission states that Greece can depend on this oil fuel for the needs of her navy, and that the expense which will be incurred by the transformation of warship engines will be small in comparison with the saving effected by the use of this oil instead of coal, which Greece has to purchase abroad.

DR. THOM OFFERS SOUND ADVICE ON SODA ASH

(Continued from Page 122)

largely removing troublesome salts before the approach of the soda flood. In freeing the oil from the sand grains the soda solution is drawn forward by capillary forces and it is necessary therefore to have a water column in the inlet wells, only a height sufficient to maintain the water supply behind the solution as it creeps forward over the sand grains, freeing the oil as it goes. Too great a pressure will leave oil behind, force water through porous streaks and necessitate the lifting of a needlessly large amount of water. Too low a pressure will needlessly retard the operation of the soda and defer the recovery of the oil, and in fields surrounded by artesian edge water under heavy pressure, it may not be mechanically feasible to use the soda flooding method. Each field will present its own special condition and at least until the major principles governing the applicability of the soda flooding method have been worked out the operators in a field will find that far more is to be gained than to be lost by uniting in the testing of the method, as is being done at Bradford."

All operators who are experimenting with this or other new methods of recovery, may find it worth their while to keep in close touch with Governmental agencies such as the Bureau of Mines and Geological Survey, which are keenly interested in the problems of oil production, and as a matter of public service are anxious to co-operate with the industry in solving its basis scientific problems.

WELDING EXPOSITION PLANNED AT BUFFALO

An international welding exposition is to be held in connection with the annual fall meeting of the American Welding Society at Buffalo, N. Y., November 17, 18, 19, 1926, in the Broadway Auditorium. It is expected to be one of the largest welding expositions ever held, showing new developments in welding apparatus and supplies. A unique feature will be an exhibit of a large variety of welded products. The exhibit will open the day preceding the annual fall meeting of the society. Indications are there will be several thousand people in attendance at the various technical sessions, inspection trips, committee meetings and exhibits, including representatives from all parts of the United States and Canada.

Technical sessions will include authoritative papers and discussions on "The Design and Development of Welding Apparatus;" "Organization of Welding on the Railroads"; "Welding of Locomotive Parts"; "Welding Science in the Engineering Curriculum of Universities," and "Arc Welding in a Gaseous Atmosphere."

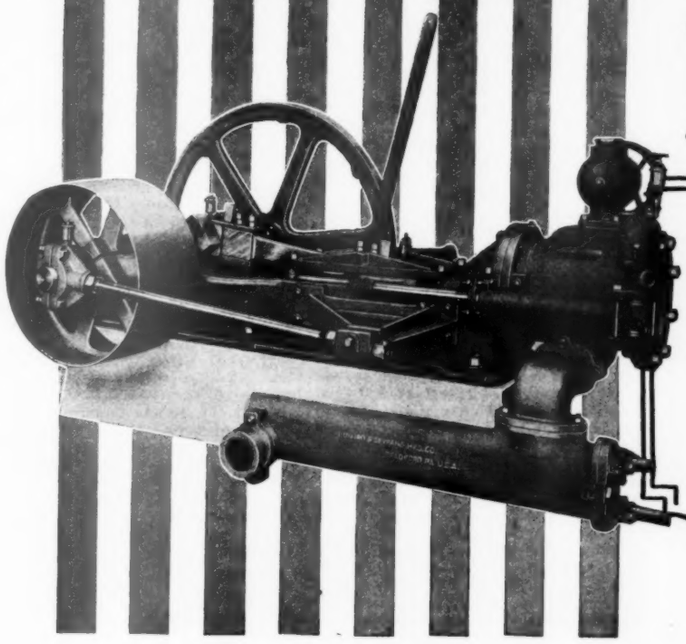
On Friday afternoon an inspection trip has been arranged to Niagara Falls with a trip through the Niagara Falls power house, followed by a buffet supper on the Canadian side and a special illumination of the falls.

A meeting of the American Bureau of Welding and of the Welding Wire Specifications Subcommittee will be held Thursday afternoon. The remarkable progress made by the research department of the American Welding Society (American Bureau of Welding) will be a source of satisfaction to the members of the society and the welding fraternity.

OIL FUEL FOR BREWERY

Sir William Waters Butler stated at the annual meeting of Mitchell & Butlers, Ltd., the largest brewery firm in the Birmingham, England, district, that the prolongation of the coal strike had caused them to make a considerable use of oil, which their engineering department was fully competent to apply from the experience gained during the strike of 1921. The use of oil was in every way successful, though it was rather costly.

Bovaird & Seyfang STEAM DRILLING ENGINES



The new Class C-1 Steam Engine illustrated is the latest BOVAIRD & SEYFANG development in Steam Engines, and was first placed on the market in 1924—*Renewable Babbitt Liners*, balanced slide valves, out board bearing, 3" throttle valves—are a few of the many features of this engine that will meet with your approval. All parts except the cylinder, cylinder head, piston and rings are interchangeable. Made in sizes 23, 25, 28 and 30 H. P.

Descriptive bulletins and prices will be sent on request.

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Due to its sliming qualities, Baroid spreads a film on the casing—both inside and out. Thus it prevents friction and erosion by cuttings as they emerge from the well.

Since Baroid has a high specific gravity, it keeps the mud in a soft, fluid condition. This makes "fishing" a drill a much easier operation.

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Made in 2", 2½" and 3" sizes. Priced, and completely described in the Sargent catalog of "Go-Getters," sent upon request.

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STANLEY BELTING

MADE IN SCOTLAND

SOUTHWEST WILDCATS

(Continued from Page 58)

be able to shut it off and bring in an oil well.

Western Guadalupe Showing

Elsewhere in southwest Texas interest is centering in Louis P. Schawe's No. 1 Rosenbrock in western Guadalupe County being drilled by J. M. Davis who has an interest in the well. Payne & Bond drilled one test on the block of leases and got a showing in what some believe was Serpentine at 1,200 to 1,305 feet but did not stop to test. Louis P. Schawe, who owned an interest with them, took over the block and drilled with the idea of testing this out. At 741 feet an oil sand was topped and casing has been set and the well is ready to test. It is 28 miles west of San Antonio and is pure wildcat. It is a little south of New Berlin.

Another wildcat which may result in a new gas pool is the L. M. Holden well several miles east of Hebbronville in Jim Hogg County. The well was to have been bailed Wednesday of last week and tested but due to delays casing was not set. The casing was being cemented late last week. While being washed the well made its best showing of gas thus far. It is far removed from production.

Duval County

O'Hern & Seacord's No. 2 Benavides, Block 12, Survey 174, has made location 300 feet from the northeast and northwest lines, and is drilling at 400 feet. Humble Oil & Refining Co.'s No. 10 Singer in the northern end of Survey 4 is drilling at 395 feet, and in Survey 255 its No. 4 Schallert has an oil showing at 2,776 feet. Humble-Reiter-Foster in Survey 406 in No. 1 Kohler, 660 feet from the south and east lines are rigging up. On Survey 168 in their No. 2 Kohler, 1,320 feet from the south and east lines they are also rigging up. Simms Oil Co.'s No. 1 Schallert, Survey 241, 1,600 feet from the west line and 3,500 feet from the south line, has had a bad fishing job at 3,758 feet, but the hole is clear and they are waiting for 4-inch drill pipe. In their No. 2 Dinn in Survey 62, 450 feet from the south and east lines they tested fresh water at 2,624 feet. In Survey 18 near the Brooks County line, Maddox & Goodman in No. 1 Carlyle are making location. George M. Ball in Survey 463 in his No. 1 Roach has been reaming. National Refining-Lewis Oil in their No. 1 Dinn in Survey 668, 200 feet from the east and south lines, are moving in. In Survey 272, 425 feet from the north and west lines, the Humble Oil & Refining Co.'s No. 1 Dowdy is fishing for drill stem at 3,190 feet. Houston Oil Co. in No. 1 Beale, Survey 571, Block 10, 900 feet from the north line of Block 10, and 800 feet west of the south line of Block 10, is standing after testing salt water at 2,449 feet.

Jim Hogg County

Moody Oil Corp.'s No. 1 Palacious, Survey 287, Block 13, 150 feet from the south and east lines is standing in hard rock at 1,600 feet. No. 1 Schroder in Survey 16, Block 10, 150 feet from the west and north lines, drilling by Hazlitt-Simmons, is drilling at 1,151 feet. Hoad and others' No. 1 Palacious in Block 247, 150 feet to the south and west lines, is drilling at 1,700 feet in gumbo. National Oil Co.'s No. 1 Allen, on the Wilbur Allen ranch, Survey 23, Block 3, in the southeast corner is in sand at 2,350 feet. O'Byrne and others in the southeast 40 acres in Block 14, Survey 230, in No. 1 Palacious is drilling in sand at 1,531 feet. They reached sand at 1,500 feet. On the Vela tract in Block 5, Section 5, 660 feet from the north line, and 150 feet from the east line, Humble Oil & Refining Co. has spudded in No. 1 Vela.

Webb County

Cole Petroleum Co. in its No. 10 "B" Benavides in Block 5, Survey 3, 150 feet south of the east line and 275 feet north of the east line, is drilling at 3,220 feet, with 100 feet of sand that showed nothing. Wheatley and others' No. 1 Reiser, Block 7, Survey 1,618, 150 feet from the north line and 300 feet from the west line, tested a small showing of oil and gas at 463 feet. Hadley-Marland in No. 1 De Spain in Survey 49, in the northeast half and the southwest fourth are drilling at 1,600 feet. In Survey 333, C. O. Maddox and others' No. 1 Laurel is drilling at 2,180 feet and will drill to 3,000 to 3,500 feet. M. J. Bashara in Block 75 of the M. J. Bashara subdivision, 222 feet from the west line and 55 feet from the south line, is moving in for test in No. 1 Espejo. Creswell-Fallin in No. 1 Billings in Section 71, Block 1, 1,431 feet to the east line and 956 feet to the north line, are still fishing at 2,503 feet. Magnolia Petroleum Co.'s No. 1 Neal, Block 12, Survey 132, 5 miles southwest of the Cole gas field, is coring at 2,908 feet, and in its No. 1 Paige-Garcia in Survey 611, 150 feet from the west corner of Survey 139, is drilling at 500 feet. In Survey 10, 163 feet from the west line and 2,146 feet from the south line, Trees Oil Co.'s No. 1 Billings is drilling at 2,000 feet. Lane-Texas Co.'s No. 1 in the city limits of Laredo is drilling at 2,968 feet.

Atascosa County

W. G. French's No. 1 Jaksik near Lemberg is drilling at 1,225 feet with lots of rock.

Bexar County

Murphy & Thorkelesen's test on the Vick tract, 2,106 feet north of the Corpus Christi road, are drilling at 800 feet.

Bastrop County

Neal A. Nelson on the Arthur Naumann, 5 miles south of Smithville, is bailing at 940 feet.

Brooks County

Ballard & Underwood's No. 1 Lasater in Survey 331, 621 feet from the north line and 150 feet from the east line, has resumed drilling.

Caldwell County

Fred Adams on the John A. Neal Survey in No. 1 Kelly is drilling at 2,230 feet. This test is near the Callihan well drilled by the United North & South Oil Co. and has topped the chalk at 2,120 feet.

Gonzales County

Bristol Oil & Gas Co. in its test on the R. M. Denman tract 1 mile southwest of Ottine, is at 200 feet. It has been using a light rig and has a crooked hole and is changing to heavy rig in order to condition the hole.

Guadalupe County

J. M. Davis in his test on the Weinert lease has his derrick up, and is waiting on rig, and in his No. 2 Rosenbrock on the Payne & Bond block is at 741 feet and has reset casing on a new sand that may make a well.

Hays County

J. E. Rodgers, in No. 1 Ernest Hohenburg, 2½ miles east of San Marcos, 450 feet from the road, is drilling at 600 feet.

Karnes County

Earl B. Reynolds's No. 2 Butler on Block 43, 1,000 feet south of No. 1 is drilling at 1,550 feet. He will reduce the hole and core from 1,600 feet down to gas at 1,700 feet.

LaSalle County

DeLange, Eiser Development Co.'s No. 1 fee on Survey 102 is coring in base of Yegua formation at 1,320 feet where production is expected.

Medina County

Western Gas & Fuel Co.'s No. 1 Chandler, in Survey 13, 700 feet from the north line and 400 feet from the west line, is being plugged and abandoned, but as so much oil was found with the salt water, the operators plan to come back later and drill for oil. In the company's No. 1 Adams it has set 10-inch casing at 175 feet, and location has been made for No. 2 Adams in the center of the 25-acre tract. Golden West Oil Co. has spudded in No. 1 Adams in center of its 40-acre tract. Witherspoon Oil Co.'s No. 1 Adams which started drilling with a spudder is being changed to a heavy rig. Pat Armstrong's No. 1 Lacey in Survey 427 is drilling in chalk at 60 feet. This test is northwest of Hondo, and in his No. 1 Long, also northwest of Hondo on the King ranch, is waiting at 700 feet for 12-inch casing. Schermerhorn Oil Co.'s No. 1 Jungman has a showing of oil in Serpentine at 1,646 feet. Ina Oil

Co.'s test on the Hoffman lease in Survey 535 has been abandoned at 2,026 feet with 112 feet of Edwards. Well tested sulphur water, and plans to move rig over and test for shallow oil. In the Ina Oil Co.'s No. 1 Charles Fingers in Survey 746 it is fishing for underreamer at 832 feet.

McMullen County

Westmoreland Oil Co., 8 miles north of Tilden in McMullen County, is moving rig 100 feet after having lost No. 1 Franklin at 2,230 feet.

Starr County

Dauchy & Bryant in Survey 125, 12 miles north of Roma in No. 1 Kelsey, is drilling at 2,138 feet. Simms Oil Co.'s No. 1 Salinas in the north one-half of Porcions 80 and 81, Block 6, is moving on for a test.

San Patricio County

John Sigmund's No. 8 McCampbell, 1,500 feet from No. 7, is at around 1,600 feet and has been busy coring which showed black shale with streaks of gray gas sand.

Wilson County

Humble Oil & Refining Co.'s D. A. Seller test on the Seller lease, 7½ miles northeast of Floresville in Wilson County, is drilling at 1,740 feet. Gibson Oil Corp.'s No. 1 Julius Espey, one-fourth mile southeast of center of the northwest line of the Espey lease, is drilling at 1,400 feet.

Zapata County

Burns & Mahone in Block 38, 660 feet from the north line and 660 feet from the west line is preparing to move on. Earl K. Bateman's No. 1 Garcia, Block 7, Survey 617, in center of Zapata County, is drilling at 2,110 feet. Magnolia Petroleum Co.'s No. 1 Cueller in Survey 278 is standing at 2,095 feet. Shortage of water is holding things back in this field. The Texas Company's No. 3 Jennings, southeast of No. 2, is drilling at 2,410 feet.

SOUTHWEST TEXAS

(Continued from Page 54)

tion 9-19-28, drilling below 2,100 feet; Levers-Carper's No. 4, Section 3-18-28, drilling below 800 feet; Navajo Oil Co.'s No. 2, Section 28-17-28, drilling below 400 feet; Ohio Oil Co.'s No. 7 Toomie-Allen, Section 28-18-28, drilling below 900 feet; Phillips & Welch's No. 1, Section 35-17-28, testing sand at 2,685 feet; Phillips & Welch Brothers' No. 1, Section 18-18-28, drilling below 300 feet; Swartz-Compton-Eaton's No. 1 Brainard permit, Section 5-18-27, preparing to drill deeper; Sun Oil Co.'s No. 1, Section 21-25-30, drilling below 1,500 feet; Skelly Oil Co.'s No. 1 Lynch, Section 22-17-31, flowing from 3,470-74 feet; Sullivan and others' No. 1, Section 1-18-31, drilling below 2,100 feet; Merriweather and others' No. 1 Goodale, Section 19-18-29, shut down at 2,357 feet; Wooley-Jones' No. 1 Beeson, Section 33-17-30, drilling below 3,100 feet; Pueblo Oil Co.'s No. 1, Section 33-17-28, drilling below 1,550 feet.

Lea County

Cap-Rock Oil & Gas Corp.'s No. 1, Section 11-16-32, waiting for rotary; Exploration Co.'s No. 1, Section 25-19-35, rig timbers ordered to lease; Henderson-Dexter-Blair's No. 1 Wyatt, Section 34-17-33, rigging up; Ingelfield-Bridges' No. 1, Section 4-17-34, drilling below 1,300 feet; Maljamar Oil & Gas Corp.'s No. 1 State lease, Section 16-17-32, rigging up; Mescalero Petroleum Co.'s No. 1 Jennie Hughes, Section 27-19-38, drilling; Maljamar corporation's No. 1 Grace Mitchell permit, Section 5-17-32, drilling below 650 feet; T. P. McDonald's No. 1, Section 22-18-34, shut down at 200 feet; Ohio Oil Co.'s No. 1 William Mitchell permit, Section 18-17-32, drilling below 800 feet; Ohio Oil Co.'s No. 1 Pearl Miller permit, Section 35-17-32, rig on the ground.

WILDCAT PLAY EXTENDING IN ALL DIRECTIONS

(Continued from Page 46)

cality which is as wide and as long as all outdoors. The Gulf Production Co. has a block of 15,000 acres in Castro County which is south of Deaf Smith County and north of Lamb County. Much of this acreage was obtained for a test well.

Following is a list of wildcats in the Panhandle:

Armstrong County

Red Hill Corp.'s No. 1 Puckett Brothers, Section 3, Hooper & Wade Survey, spudding 200 feet.

Childress County

Gibson Oil Co.'s No. 1 Smith, cleaning out to deepen, total depth 2,504 feet.

Cochran County

J. C. Whicker's No. 1 Landon, rig.

Collingsworth County

Von Allmen and others' No. 1 McDowell, C SW, Section 107, Block 22, location; Gubsin Oil Co.'s No. 1 Williams, Section 5, Block 13, drilling at 1,450 feet; Martin and others' No. 1 T. V. Norwood, Section 30, Block 16, rig.

Dallam County

James and others' No. 1 fee, Section 9, Block 47½, drilling 2,865 feet.

Donley County

A. T. Drilling Co.'s No. 1 F. E. Harrington, C SW, Section 39, Block C-3, G. C. & S. F. Survey, shut down at 180 feet.

Gray County

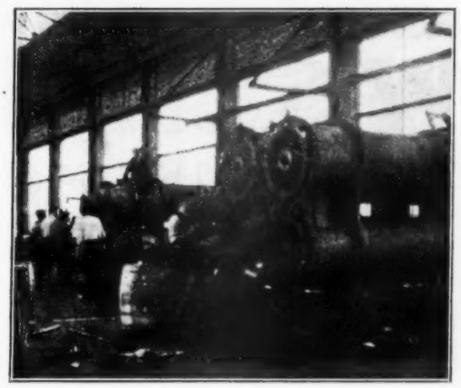
Archer, Blake and others' No. 1 Turneau, Section 111, Block B-2, rigging up tools; Bay Shore Oil Co.'s No. 1 Bradford, Section 148, Block B-2, shutting off 165,000,000 feet of gas at total depth 2,666 feet; Blackwell & McGee's No. 1 Bowers, Section 92, Block B-2, shut down at 280 feet. Canyon Oil Co.'s No. 1 Jackson Estate, Section 60, Block B-2, skidding rig because of quick sand; Constantin and others' No. 1 Dial, Block 25, shut down at 2,000 feet. Cranfill Brothers' No. 1 T. B. Noble, Section 10, Block A-6, drilling at 640 feet; Eagle Creek Oil Co.'s No. 1 J. Hopkins, Section 66, Block B-2, spudded and shut down; H. B. Ellers' No. 1 Crews, Section 12, Block 25, rig on ground; Empire Gas & Fuel Co.'s No. 1 Benton, Section 64, Block 3, set 8-inch at 2,555 feet, drilling at 2,585 feet; No. 1 B. Hughey, Section 129, Block 3, drilling 2,450 feet; No. 1 J. J. Wall, Section 161, Block 3, drilling 1,060 feet; Jack Greenwood and others' No. 1 H. B. Lovett, Section 26, Block B-2, drilling at 500 feet. Gulf Production Co.'s No. 1 A. Holmes, drilling 2,385 feet. No. 1 Merten, Section 88, Block 3, drilling 2,515 feet; No. 1 R. S. McConnell, trying to pull 20-inch pipe, 500,000 feet of gas 2,785 feet. Haughn and others' No. 1 A. J. Daur, Section 237, Block B-2, cellar; Magdalene Oil Co.'s No. 1 J. E. Williams, Section 17, Block 1, A. C. H. & B. Survey, spudded 85 feet and shut down; Nabob Oil Co.'s No. 1 J. S. Morse, Section 68, Block 25, fishing 1,915 feet; Pampa Oil Co.'s No. 1 W. R. Campbell, Section 90, Block 3, rig; Henry Riley's No. 1 J. M. White, SE cor. Section 212, Block M-2, rig; Roxana Petroleum Corp.'s No. 1 B. E. Finley, in B. E. Cheney Survey, drilling 450 feet; Shamrock Petroleum Co.'s No. 2 Merten, Section 82, Block 3, drilling 2,640 feet; The Texas Company's No. 2 Saunders, Section 81, Block B-3, fishing 2,435 feet. Travis and others' No. 1 J. Back, Section 44, Block 25, rig blown down; Upham Gas Co.'s No. 1 W. R. Gammage, Section 4, Block 25, location. Weir, Kribs & Finklea's No. 1 B. F. Talley, Section 114, Block M-2, spudded and shut down for water; Young and others' No. 1-A Holmes, Section 106, Block 3, drilling 2,775 feet.

Hansford County

F. W. Dillard's No. 1 F. A. Davis, Section 50, Block 2, spudded and shut down; Oklavania Oil Co.'s No. 1 Whitson, C NW, Section 2, Block R, B. & B. Survey, drilling 570 feet.

Hartley County

Crane Oil Co.'s No. 1 Coots, NE cor. NW, Section 52, Block X-R, location; Deep Rock Oil Co.'s No. 1 Lyman & Balfour, Section 9, Block 2, shut down 1,420 feet; Dorning and others' No. 1 A. C. Ashby, NE cor. Section 1, Block 1, J. Poitevent Survey, location; Eslick and others' No. 1 J. B. Irving, SW cor. NE, Section 13, Block 13, C. S. & S. Survey, drilling at 1,000 feet; W. H. Holmes' No. 1 G. B. Coots, Section 58, Block



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X-R, skidded rig 20 feet northwest and rigging up, total depth old hole 595 feet; Humble Oil & Refining Co.'s No. 1 J. M. Shelton, C NW SE, Section 63, Bravo Subdivision, underreaming 1,052 feet. J. E. McKanna's No. 1 E. S. Collins, Section 3, Block L-S, rigging up; No. 1 E. H. Farwell and others' C SW Section 30, Block 22, C. S. & S. Survey, rigging up. No. 1 J. M. Shelton Estate, NW cor. League 202, Capitol lands, shut down at 650 feet; Kork Oil Co.'s No. 1 J. M. Shelton Estate, C Section 1, Block B-8, E. L. & R. R. Survey, spudded and shut down; Breck Walker's No. 1 Stone, NE cor. Section 35, Block I. T. O. T. & N. O. Survey.

Hemphill County

Andrade and others' No. 1 Rumbolt, Section 44, Block 1, I. & G. N. Survey, location; Dorning and others' No. 1 Alexander, NE cor. J. Poitevent Survey, spudded and shut down; Hoover and others' No. 1 Schaller Estate, Section 4, spudded and shut down; No. 1 fee, Section 119, Block 41, H. & T. C. Survey, drilling 350 feet. Mitchell and others' No. 1 J. E. George, SE cor. NE, Section 40, Block A-2, H. & G. N. Survey, drilling at 650 feet. McCorkel and others' No. 1 Schalle Estate, J. Fanning Survey, building rig.

Hockley County

Ricker & Dodson's No. 1 Ellwood, SW cor. Section 55, Block A, R. M. Thomson Survey, running 10-inch 790 feet.

Moore County

Amarillo Oil Co.'s No. 1 Masterson-J, Section 59, Block O-18, drilling 1,340 feet; No. 2 Terry Thompson, Section 19, Block 44, drilling 1,400 feet; Cadman and others' No. 1 J. T. Sneed, Jr., Section 68, Block 3, shut down for casing at 1,850 feet. Shamrock Petroleum Co.'s No. 1 O. E. Gober, Section 16, Block M-21, shut down at 300 feet; Douglas Oil Co.'s No. 1 H. W. Beauchamp, Section 112, Block 44, drilling at 650 feet. Flowers and Marland Oil Co.'s No. 1 J. T. Sneed, Jr., Section 25, Block 1, shut down at 1,465 feet; Humble Oil & Refining Co.'s No. 1 Kilgore, SW cor. NE, Section 28, Block 44, shut down at 270 feet; Phillips Petroleum Co.'s No. 1 Sneed, N. Jones Survey, shut down at 3,095 feet; Masters Oil Co.'s No. 1 J. T. Sneed, Jr., Section 58, Block 6-T, drilling at 270 feet; Morton & Co.'s No. 1 Rubert, Section 191, Block 3-T, shut down at 210 feet; Prairie Oil & Gas Co.'s No. 2 Sneed, Section 26, Block 6-T, shut down for rig repairs at 2,110 feet.. Moore County Oil Co.'s No. 1 Sneed, Section 30, Block 6-T, shut down at 450 feet; Shadler Brothers' No. 1 John Lowery, SE cor. Section 237, Block 44, H. & T. C. Survey, rig.

Ochiltree County

W. G. Burton's No. 1 Stickler, Section 579, Block 43, underreaming at 2,500 feet; Hamilton and others' No. 1 R. E. Wamble, Section 144, Block 43, shut down at 250 feet. McCorkle's No. 1 R. H. Moore, Section 471, Block 43, drilling at 1,340 feet; Standard Development Co.'s No. 1 Bowden, Section 923, Block 43, shut down at 900 feet.

Potter County

Amarillo Oil Co.'s No. 5 Lee Bivins-A, Section 25, Block O-18, drilling at 1,710 feet. No. 1 Fuqua, Section 4, rigging up; California Co.'s No. 1 G. A. Carey and others' Section 4, Block Z-6, new location; Gulf Production Co.'s No. 1 W. H. Bush, Section 89, Block 9, preparing to pull 8-inch at 3,005 feet; Kelly & Harris' No. 1 Bush, NE cor. Section 161, Block 9, location; Farmers Oil & Gas Co.'s No. 1 J. A. Jones, rig.

Lipscomb County

Everett and others' No. 1 Mrs. H. D. May, C Section 612, Block 43, H. & T. C. Survey, rig. McCorkle and others' No. 1 H. O. Peery, C Section 733, Block 43, rig on ground. Snyder and others' No. 1 A. Barton, drilling 2,630 feet.

FIRST LOCATIONS IN PANHANDLE-NORTH TEX.

(Continued from Page 50)

others' No. 1 J. Danglemayer, 6,290 feet south and 4,880 feet west NE cor. George Ivy Survey, A-516.

Hansford County

Oklavania Oil Co.'s No. 1 G. L. Rowland, 330 feet north and west SE cor. SW, Section 2, Block 1, W. & N. W. R. R. Survey.

Hardeman County

E. H. Pigg and Winnipeg Oil Co.'s No. 1 A. C. Nicholson, 150 feet south and west NE cor. Section 74, Block 16, H. & T. C. Survey.

Hutchinson County

E. J. Dunigan and others' No. 2 Johnson Brothers, 330 feet south and east NW cor. SE SW, Section 21, Block Y; No. 3, 330 feet north and west SE cor. SE SW, same section; Four Y Oil Co.'s No. 1 W. L. Kingsland, 280 feet north and 250 feet east SW cor. west half NE NE, Section 4, Block Y. Kistler Oil Co.'s No. 1 Johnson Brothers, 330 feet south and west NE cor. SW NE, Section 21, Block Y; No. 2, 330 feet north and west SE cor. SW NE; No. 3, 330 feet south and east NW cor. SW; No. 4, 330 feet north and east SW cor. SW NE, all in Section 21, Block Y; Phillips Petroleum Co.'s No. 3 Johnson Brothers-Finklea, 330 feet north and east SW cor. east 40 acres, Lot 6, Johnson Brothers Subdivision, Mary Whitely Survey No. 1; Phillips & Heywood's No. 3 H. E. Smith and others, 330 feet north and east SW cor. NW SE, Section 14, Block Y; Prairie Oil & Gas Co. and others' No. 27 Johnson Brothers-A, 330 feet south and West NE cor. SE, Section 21, Block Y; No. 28, 330 feet north and east SW cor. NE SW, Section 21; No. 29, 495 feet south and 330 feet east, NW cor. NE NW, Section 21; No. 30, 330 feet north and east SW cor. SE NW, Section 21; No. 31, 330 feet south and west NE cor. SW NE, Section 20; No. 32, 330 feet south and west NE cor. NW SE, Section 21; No. 33, 330 feet north and west SW cor. Section 63, and located in Section 64, Block 46, H. & T. C. Survey; Prairie Oil & Gas Co.'s No. 2 Diana Shaw, 330 feet south and 165 feet west NE cor. Section 27, Block Y.

Montague County

Cochran and others' No. 1 W. C. Maston, 540 feet south and west NE cor. east 40 acres W. C. Maston 100-acre tract out of Fielding Secrest Survey, A-665; F. H. E. Oil Co.'s No. 2 N. J. Howard and others-B, 150 feet north and and east SW cor. their 22-acre lease J. Chambliss Survey, A-123; Fleming, Hardesty & Elliott's No. 3 Mrs. M. H. Salmon and others, 750 feet north and east SW cor. their lease in S. Little Survey, A-417; Gracey & Kahle's No. 3 J. W. Maddox, 200 feet south and east NW cor. their 20-acre lease out of J. Chambliss Survey, A-123; Humble Oil & Refining Co.'s No. 8 J. W. Maddox, 877 feet south and 150 feet west NE cor. their 80-acre lease out of C. W. Thompson Survey, A-741; Texhoma Oil & Refining Co.'s No. 10 N. J. Howard and others, 450 feet south and 150 feet east NW cor. their 120-acre lease out of J. Chambliss Survey, A-123; No. 8 J. W. Rowland, 400 feet south and 150 feet west more northerly NE cor. their 71-acre lease J. Chambliss Survey, A-123; No. 9, 450 feet north and 535 feet east SW cor. same 71-acre lease; H. C. Dickey and others' No. 1 G. C. Williams, 666 feet SE NW line and 666 feet NE SW line G. C. Williams 91-acre tract out of Section 64, Panola County school land, A-587.

Reagan County

Moody Oil Corp.'s No. 1 Sawyer Cattle Co., center SW, Section 150, Block 1, T. & P. R. R. Survey.

Upton County

Marland Oil Co.'s No. 29 A. S. Burleson, 330 feet south and 3,710 feet west NE cor. their 480-acre lease, T. C. Jones Survey No. 100; No. 30, 330 feet south and 1,418 feet west NE cor. their 480-acre lease, same survey; No. 31, 330 feet south and 874 feet west NE cor.; No. 32, 873 feet south and 330 feet west NE cor.; No. 33, 1,416 feet south and 330 feet west NE cor., all in T. C. Jones Survey No. 100. The Texas Company's No. 3 A. S. Burleson, 330 feet north and 867 feet east SW cor. their 160-acre lease T. C. Jones Survey, No. 100; No. 4, 330 feet north and 867 feet west SE cor. same 160-acre lease.

Wichita County

Magnolia Petroleum Co.'s No. 19 W.

W. Viles, 2,150 feet north and 300 feet west SE cor. J. Wainschmidt Survey, A-570; Dale Oil Corp.'s No. 14 T. L. Burnett, 150 feet east center west line south half Section 2, J. F. Torrey & Co. Survey, A-787; Magnolia Petroleum Co.'s No. 2 S. S. Fassett, 150 feet south and west NE cor. south 60 acres, west 120 acres Dale Land & Cattle Co. Survey-A-596; Pigg & Murchison's No. 1 F. W. Warner, 150 feet south of north line and 150 feet east of west line south 40 acres, west 80 acres, F. W. Warren 198-acre tract out of B. F. Blount Survey, No. 3, A-550; Ryan Petroleum Co.'s No. 80 G. L. Nance, 1,900 feet south and 1,040 feet east NW cor. Sam O. Fowler Survey, A-78; No. 81, 1,900 feet south and 705 feet east NW cor. same survey; No. 82, 2,740 feet south and 2,050 feet east NW cor. same survey; No. 83, 3,025 feet south and 1,800 feet east NW cor. same survey; Stidham & Thrasher's No. 1 Ward & Todd, 450 feet south and 50 feet east NW cor. Lot 14, Ward & Todd Subdivision, and located in G. C. & S. F. Survey No. 6, A-625; The Texas Company's No. 312 W. T. Waggoner, 3,400 feet south and 600 feet east SE cor. Section 19, G. C. & S. F. Survey, A-359, and located in G. C. & S. F. Survey, No. 20, A-606.

Wilbarger County

Humble Oil & Refining Co.'s No. 16 D. Bone and others-B, 200 feet north and 150 feet east SW cor. NE NE, Section 100, Block 14, H. & T. C. Survey; Milham Oil Corp.'s No. 3 W. T. Waggoner-L, 155 feet south and 450 feet west NE cor. Section 42, Block 4, H. & T. C. Survey; No. 16, 205 feet north and 155 feet east SW cor. their "L" lease, Section 42, Block 4, same survey. Phillips Petroleum Co.'s No. 8 W. T. Waggoner-T, 150 feet north and east SW cor. NW NW, Section 44, Block 4, H. & T. C. Survey; No. 1 W. T. Waggoner-X, 220 feet south and west NE cor. SE NW, Section 44, Block 4, same survey; No. 5 W. T. Waggoner-HH, 155 feet north and 20 feet west NE cor. their 43.3 acres "HH" lease out of Section 42, Block 4, same survey; No. 2 W. T. Waggoner-OO, 220 feet north and west SE cor. SW NE, Section 47, Block 2, same survey; No. 11 W. T. Waggoner-NN, 155 feet south and 2,180 feet west NE cor. their 177-acre "N" lease in Section 42, Block 4, same survey; No. 3 W. T. Waggoner-PP, 543 feet south and 150 feet east NW cor. Section 41, Block 4, same survey; No. 13 W. T. Waggoner-QQ, 150 feet north and 2,171.6 feet east SW cor. their 80-acre "Q" lease, Section 47, Block 4, same survey; No. 5 W. T. Waggoner-UU, 200 feet south and east NW cor. their 20-acre "UU" lease, Section 42, Block 4, same survey.

Young County

Madden & Hunt's No. 6 S. M. J. Benson, 750 feet north and 450 feet east SW cor. east 82 acres, south 165 acres, Section 1,451, T. E. & L. Survey; J. J. Moran and others' No. 1 Graham Stewart, 150 feet south and east NW cor. east 43.7 acres, south 78.7 acres, north 157.5 acres, east 315 acres David Dawson Survey, A-76; Robert Oil Co.'s No. 2 Graham Stewart, 1,290 feet south and 1,860 feet west NE cor. David Dawson Survey, A-76; The Texas Company's No. 16 A. Beardon, 1,500 feet north and 2,062 feet west SE cor. I. A. Payne Survey, A-1,514 and located in S. G. Hardaway Survey, A-136; No. 1 Mrs. O. W. Matthews, 150 feet south and 994 feet west NE cor. east 75 acres, north 330.6 acres Mrs. O. W. Matthews acre tract out of A. Rohus Survey, A-240; No. 1 Mrs. N. Prideaux, 150 feet north and west SE cor. I. & G. N. Survey, A-1,324; Wo-Mac Oil Co.'s No. 5 Graham Stewart, 1,854 feet south and 662 feet west NE cor. Davis Dawson Survey, A-76; Nance & Lucas' No. 2 J. W. Boozer, 150 feet north and west SE cor. east 64.5 acres, west 104.5 acres, north 124.5 acres Jacob Garrett Survey, A-108.

CORRECTED LOCATIONS AND NAMES

Hutchinson County

Empire Gas & Fuel Co.'s No. 3 Johnson Brothers-B, 330 feet south and west NE cor. SW, Section 21, Block Y; Homestead Oil Co.'s No. 1 J. F. Weatherly, 330 feet south and west NE cor. NE NW, Section 18, Block Y.

Carson County

Humble Oil & Refining Co.'s No. 1 S. B. Burnett-A has been changed to No. 1 S. B. Burnett, Account 3, and No. 1 S. B. Burnett in Section 127 has been numbered Account 4.

Archer County

Simms Oil Co. and Burns' No. 2 J. H. Turbeville, 560 feet south and 215 feet west NE cor. Section 21, Jefferson County school land, A-240.

Callahan County

Prairie Oil & Gas Co.'s No. 6 R. Cunningham, 150 feet south and 450 feet east of NW cor. of east 40 acres of north half Section 73, Comal County school land.

Montague County

Pure Oil Co.'s No. 3 J. W. Maddox-C, 200 feet east and 600 feet north of SW cor. Lot 4, C. W. Thompson Survey, A-741; Pure Oil Co.'s Nos. 1 and 2 Rowland and others have been numbered Rowland and others-B. Texhoma Oil & Refining Co.'s No. 10 N. J. Howard and others, 1,940 feet north and 200 feet east of SW cor. their 150-acre lease in J. Chambliss Survey, A-123; No. 13, 2,300 feet north and 1,700 feet west of SE cor. same 150-acre lease; No. 14, 1,940 feet north and 150 feet east of SW cor., same lease.

Wichita County

J. E. Blevins' Nos. 1 to 32 on the C. Birk and W. F. George lease are now carried under the name of Bourbon Royalty Co. O. H. Chapman's Nos. 1, 2 and 3 H. O. Chapman are now carried as Charles W. Flint's wells. Southerland & Cox's Nos. 1 to 7 Birk & George are now Flint & Woolridge's Nos. 1 to 7 Birk & George. The same parties have also taken over Nos. 1 to 4 M. D. Brown, Nos. 1 to 16 H. Zink and Nos. 1 to 6 H. Zink, Lease 2, formerly owned by the Griswold Oil Co. Evangeline Oil Co.'s Nos. 1 to 11 J. A. Kemp, Block 28, Nos. 11 to 17 J. A. Kemp, Block 29, and No. 18 J. A. Kemp-Lee have been taken over by W. C. Lockey.

Young County

Cook & Reeder's No. 1 C. N. Keen has been changed to No. 1 Mrs. O. W. Matthews. Magnolia Petroleum Co.'s No. 1 C. N. Keen has also been changed to No. 1 Mrs. O. W. Matthews. The well formerly carried as Tidal Oil Co.'s No. 2 S. M. J. Benson is now carried as Madden & Hunt's No. 5 S. M. J. Benson. Madden and others' Nos. 1 to 4 S. M. J. Benson have been renumbered and are carried as Madden & Hunt; No. 2 is now No. 1, No. 3 is No. 2, No. 4 is now No. 3 and No. 5 is now No. 4. J. J. Moran's Nos. 1 to 4 G. P. Stewart are carried as Wo-Mac Oil Co.'s Nos. 1 to 4 G. P. Stewart. Nance & Lucas' No. 1 J. W. Boozer, Hemphill and others' Nos. 1 to 7 M. V. Keller-B and the same interests' No. 9 M. V. Keller-B have been taken over by Pitzer & West.

PRODUCTION BY FIELDS FOR WEEK ENDING SEPTEMBER 6, 1926

Electra

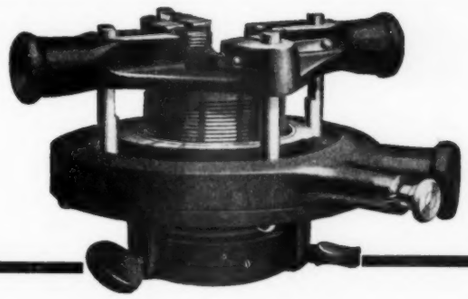
Atlantic Oil Producing Co.	48
Empire Gas & Fuel Co.	748
Gulf Production Co.	899
Humble Oil & Refining Co.	125
Magnolia Petroleum Co.	3,499
Panhandle Refining Co.	40
Phillips Petroleum Co.	16
Prairie Oil & Gas Co.	105
Rio Bravo Oil Co.	500
The Texas Company	3,382
Texhoma Oil Refining Co.	1,205
Miscellaneous	6,073
Total	16,646

Burkburnett

Gulf Production Co.	435
Humble Oil & Refining Co.	441
Magnolia Petroleum Co.	2,519
Panhandle Refining Co.	211
Simms Oil Co.	20
Sinclair Oil & Gas Co.	50
Skelly Oil Co.	156
The Sun Oil Co.	40
The Texas Company	359
Texhoma Oil & Refining Co.	518
Miscellaneous	7,200
Total	11,949

Iowa Park

Atlantic Oil Producing Co.	56
Gulf Production Co.	115
Humble Oil & Refining Co.	120
Magnolia Petroleum Co.	329
Panhandle Refining Co.	45
Roxana Petroleum Corp.	8
Simms Oil Co.	61
The Texas Company	196



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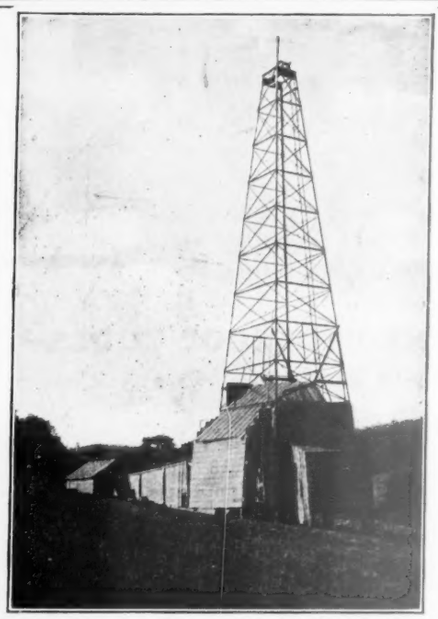

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Makes joints 100% tight — absolutely leakproof where all other methods fail.

Throughout the oil industry this non-corrosive, greaseless compound is being used to end all trouble from leaky joints. Wherever used it meets with overwhelming endorsement. Users claim it is invaluable around the cracking plant, where it is most difficult to keep hot oil under pressure from leaking and causing excessive smoke.

Due to its scientific preparation and graphite base, this paste is oil, acid and gasoline proof. It is soluble only in water. Of paste-like consistency, it is easily spread on pipe joints, fittings, flanges, flange unions, and every place where a leakproof joint is desired. It expands under heat, filling every crack and crevice—then carbonizes. It renders joints not only leakproof but easy to take apart if desired. Also proven invaluable for use on manhead gaskets on storage tanks, and for painting seams after making repairs to stills. Often replaces gaskets on rough joints. Positively seals all ground joints. Key Graphite Paste was originally designed to correct the oil leakage around pressure stills, and for this purpose has no equal.

Key Graphite Paste is put up in barrels, half barrels, 60-lb. and 30-lb. drums, and 1, 3, 5 and 10-lb. cans.

KEY BOILER EQUIPMENT COMPANY
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East St. Louis, Ill.

KEY Graphite Paste

Texhoma Oil & Refining Co.	617
Miscellaneous	2,775
Total	4,368
Wilbarger	
Atlantic Oil Producing Co.	53
Empire Gas & Fuel Co.	824
Gulf Production Co.	56
Humble Oil & Refining Co.	3,012
Phillips Petroleum Co.	5,642
Prairie Oil & Gas Co.	113
Roxana Petroleum Corp.	401
The Texas Company	21
Texhoma Oil & Refining Co.	80
Miscellaneous	4,218
Total	14,421
Archer	
Atlantic Oil Producing Co.	233
Barnsdall Oil Co.	959
Cosden Co.	320
Empire Gas & Fuel Co.	514
Gulf Production Co.	2,236
Humble Oil & Refining Co.	1,134
Independent Oil & Gas Co.	20
Magnolia Petroleum Co.	1,551
Marland Oil Co.	742
Panhandle Refining Co.	120
Phillips Petroleum Co.	552
Prairie Oil & Gas Co.	1,900
Roxana Petroleum Corp.	270
Simms Oil Co.	824
Sun Oil Co.	260
The Texas Company	3,509
Texhoma Oil & Refining Co.	2,738
Tidal Oil Co.	38
Miscellaneous	12,150
Total	30,070
Young	
Atlantic Oil Producing Co.	708
J. S. Cosden	230
Gulf Production Co.	193
Humble Oil & Refining Co.	245
Magnolia Petroleum Co.	130
Marland Oil Co.	2
Mid-Kansas Oil & Gas Co.	10
Panhandle Refining Co.	125
Phillips Petroleum Co.	15
Prairie Oil & Gas Co.	10
Roxana Petroleum Corp.	130
Simms Oil Co.	609
Sinclair Oil & Gas Co.	360
Sun Oil Co.	247
The Texas Company	325
Texhoma Oil & Refining Co.	340
Tidal Oil Co.	70
Miscellaneous	4,612
Total	8,361
Stephens	
Arkansas Fuel Oil Co.	25
Empire Gas & Fuel Co.	25
Gulf Production Co.	1,078
Humble Oil & Refining Co.	570
Magnolia Petroleum Co.	345
Mid-Kansas Oil & Gas Co.	1,460
Phillips Petroleum Co.	365
Prairie Oil & Gas Co.	750
Republic Production Co.	130
Roxana Petroleum Corp.	45
Simms Oil Co.	30
Sinclair Oil & Gas Co.	75
Sun Oil Co.	165
The Texas Company	930
Texas Pacific Coal & Oil Co.	1,135
Transcontinental Oil Co.	2
Miscellaneous	4,215
Total	11,345
Shackelford	
Amerada Petroleum Corp.	3
Empire Gas & Fuel Co.	20
Humble Oil & Refining Co.	1,380
Independent Oil & Gas Co.	8
Magnolia Petroleum Co.	60
Phillips Petroleum Co.	562
Prairie Oil & Gas Co.	12
The Texas Company	170
Texhoma Oil & Gas Co.	70
Miscellaneous	6,626
Total	10,911
Ranger	
Arkansas Fuel Oil Co.	5
Gulf Production Co.	539
Humble Oil & Refining Co.	45
Magnolia Petroleum Co.	540
Mid-Kansas Oil & Gas Co.	110
Panhandle Refining Co.	120
Phillips Petroleum Co.	15
Prairie Oil & Gas Co.	545
Republic Production Co.	40
Simms Oil Co.	20
Sinclair Oil & Gas Co.	280
The Texas Company	150
Texas Pacific Coal & Oil Co.	795
Transcontinental Oil Co.	30
Miscellaneous	2,395
Total	5,629
Eastland-Comanche	
Empire Gas & Fuel Co.	5
Humble Oil & Refining Co.	90
Magnolia Petroleum Co.	560
Mid-Kansas Oil & Gas Co.	130
Phillips Petroleum Co.	35
Prairie Oil & Gas Co.	85
Sinclair Oil & Gas Co.	20
Skelly Oil Co.	130
The Texas Company	95
Transcontinental Oil Co.	22
Miscellaneous	665
Total	1,837
Brown	
Cosden Co.	595
Humble Oil & Refining Co.	4,619
Phillips Petroleum Co.	175
Prairie Oil & Gas Co.	610
Simms Oil Co.	20
The Texas Company	630
Witherspoon Oil Co.	20
Miscellaneous	6,005
Total	12,674
Callahan	
Amerada Petroleum Corp.	100
Humble Oil & Refining Co.	3
Prairie Oil & Gas Co.	840
The Texas Company	95
Texas Pacific Coal & Oil Co.	20
Miscellaneous	3,610
Total	4,668
Miscellaneous Pools	
Reagan County	28,439
Clay County	580
Montague County	6,954
Jack County	270
Throckmorton County	1,653
Baylor County	164
Palo Pinto County	439
Coleman County	1,805
Scurry County	42
Mitchell County	3,636
Crockett County	1,225
Upton County	6,724
Total	51,932
Panhandle	
Carson County	3,396
Hutchinson County	109,409
Wheeler County	235
Gray County	3,670
Total	116,710
Grand total	301,455

N. LOUISIANA-ARKANSAS

(Continued from Page 56)

16-15, which tested salt water at 2,689 feet, was plugged back to 2,649 feet and bailed dry. The casing was perforated at 2,644-51 feet and the well is making 5,000,000 feet of gas. Mazda Oil Corp. abandoned two old holes that have been shut down for several weeks. No. R-6 Lawton, Section 10-16-15, in salt water sand at 2,617 feet, and No. R-4 Lawton at 2,450 feet. Gulf Refining Co. completed a brace of good pumpers, No. 49 Hardy-Murphy, Section 3-16-15, for a 195-bbl. well in sand at 2,369-83 feet and No. 39 Hardy-Murphy, Section 5 16-15, is making 150 bbls. on the pump at 2,359 feet.

In the Norphlet sector, Bailey & Trimble's No. 2 LeCroy, Section 17-16-15, an old completion deepened, tested salt water at 2,667 feet and was abandoned with the casing in the hole. J. E. Crosbie's No. 2 Cook, Section 16-16-15, another old well, was junked and abandoned at 2,643 feet. Gulf Refining Co.'s No. 47 L Werner, Section 6-16-16, was finished in sand at 2,269-72 feet, making 10 bbls. of fluid, 50 per cent salt water, on the pump. Peer Oil Corp.'s No. 7 Cook, Section 17-16-15, was completed in sand at 2,652-90 feet, making 10 bbls. on the pump.

Lisbon Area

Lisbon finished the week with an average of a well a day for the week. Gulf Company's No. 3 Parker, Section 21-17-16, is pumping 25 bbls. from sand at 2,131 feet. Same company's No. 1 Patterson, Section 20-17-16, is making 15 bbls. on the beam from sand at 2,133-72 feet. H. L. Hunts' No. 8 H. O. Murphy, Section 4-17-16, is making 40 bbls. on the pump from 81 feet of broken formation topped at 2,153 feet. On Lion Oil & Refining Co.'s Mitchell lease, Section 17-17-16, No. A-1 was completed at 2,124 feet for a 10-bbl. pumper, and No. A-10 was a 15-bbl. pumper at 2,137 feet. Rovenger Oil Corp.'s No. 8 Dumas, Section 9-17-16, is making 20 bbls. on the beam from sand at 2,104 feet. Wingfield and associates' No. B-4 Slaughter, Section 3 17-16, is pumping 12 bbls. from sand at 2,064-90 feet.

Arkansas, like all other fields in the district, suffered a slight slump in field work as completions took an abnormal leap during the week. In Smackover, Ackerly Drilling Co.'s No. 1 Murphy, Section 1-17-16, is shut down at 2,000 feet for rig repairs. A derrick is up for W. H. Gillilands' No. B-1 Hodges, NE cor. W½ Lot 5 NE, Section 1-16-17. Six-inch was cemented at 2,616 feet at Gladys Belle Oil Co.'s No. 5-A Cook, Section 16-16-15. Five inch casing was cemented at 2,530 feet at Grimes & Jones' No. 1 Prothro, Section 3-18-15. Same operators' No. 10 Van Hook, Section 8-18-14, is a derrick pattern; Gulf Company's No. 41 Hardy-Murphy, Section 4-16-15, is waiting for casing to set at 2,343 feet and No. 42 is a rig. Gulf Companys' No. 48 Werner Co., Section 6-16-16, is a rig. Progress at Harrels' No. 7 Flenniken, Section 23 17-16, is being delayed by a fishing job at 2,536 feet. F. C. Hendersons' No. 3 Smith, Section 18-16-15, tested salt water in sand at 2,727-31 feet and is to be deepened.

Other Operations

Six and one-quarter-inch casing was cemented at 2,966 feet and Imperial Oil & Gas Co.'s No. 1 Goodwin, Section 26-17-16, is drilling at 2,968 feet. Keene & Woolfs' No. 5 Murphy, Section 9-16-15, has 2,000 feet of fluid in the hole,

35 per cent salt water, from sand at 2,628-37 feet and is waiting for a standard rig. The sand pump is being run at Lion Company's No. 10 Graves, Section 3-16-15, which had sand at 2,667-73 feet. Magnolia Companys' No. 3 Childs, Section 8-16-16, is waiting for 8½-inch casing to set at 2,587 feet. Magnolia Company's No. 1 Murphy, Section 28-16 16, was dry at 2,076 feet with a show of oil and gas at 2,085-2,102 feet and is being deepened. Magnolia Company's No. 2 M. J. Scott, Section 12-16-17, is being bailed to test at 2,250 62 feet. Matthews and associates' No. 1 Lewis, Section 14-19-12, is waiting for 6-inch casing to set at 2,650 feet. The bottom of the hole at 2,382 feet was cemented at Murdock and associates' No. 4 Hays, Section 4 16-15, and old well completed last September at 2,382 feet, flowing 3,500 bbls. of fluid, 90 per cent salt water.

Peer Oil Corp.'s No. 1 Hollis, NE cor. NW SW, Section 36-18-12, is a derrick pattern. Pure Oil Co.'s No. 7 Bilyew, Section 8-16 15, is drilling at 170 feet. The drilling stem stuck at 2,000 feet at A. H. Ramage's No. C-6, Lawton, Section 10 16-15. The bottom of the hole at 2,715 feet was cemented at Sam Richardson's No. M-2 Murphy, Section 14-16-15, and the casing milled through at 2,660 feet. The test tested salt water with a show of gas at 2,662 feet. A rig is up for Simms Oil Co.'s No. 12 Cook, SE cor. NE NE, Section 16-16 15. Six-inch casing was cemented at 2,062 feet at Simms Company's No. 1 Matthews, Section 34-16-16. Southern Crude Oil Purchasing Co.'s No. 10 Graves, Section 3-16 15, is drilling at 2,546 feet. Southern Company's No. A-5 Wells, Section 15-16-15, is drilling at 2,510 feet. Standard Oil Co.'s No. 4 Reynolds, Section 6-18-15, is drilling in shale at 2,182 feet and fighting a cavy hole. A derrick is up for Standard Company's No. 37 Hardy, 560 feet east and 200 feet north, SW cor. NE NE, Section 9-16-15.

Cemented Back

Sunny Jim Oil Co.'s No. 3 Flenniken, Section 9-16 15, was cemented back from 2,650 feet to 2,484 feet after 2,494 feet of 4¼-inch casing, which collapsed 16 feet off bottom, had been pulled. The Texas Company's No. 8 Calloway, Section 4-16-15, is drilling at 1,980 feet, and 6 inch casing was cemented at 2,350 feet at No. 8 Hays, same section. A derrick is up for Tharpe and associates' No. 1 Peck, NW cor. SW NE, Section 22-18-13

In the Lisbon area Atlantic's No. 4 Ford, Section 3-17-16, is waiting for 6-inch to set at 2,070 feet. Humble's No. 2 Cruise, Section 21 17-16, is a derrick and No. 2 Goodwin, Section 20-17-16, is drilling at 1,365 feet. Imperial Company's No. 1 Parker, Section 21-17-16, has 400 feet of oil in the hole from the sand at 2,093-2,115 feet and is waiting for a standard rig. No. 4 Primm, same section, had sand at 2,116-55 feet and is waiting for a standard rig. On the Lion Company's Mitchell lease, Section 17-17-16, No. A 13 is drilling at 1,750 feet; A-17 at 1,215 feet. Magnolia Company's No. 3 Halsey, Section 20-17-16, is waiting for a standard rig at 2,-152 feet; 6-inch was cemented at 2,-112 feet at No. 4, and No. 5 is drilling at 920 feet. Six-inch was cemented at 2,093 feet at Magnolia Company's No. 2 Slaughter, Section 17-17 16.

A derrick is up for Reynolds and Marr's No. 4 Goodwin, SE cor. NE NE, Section 21-17-16, and 6 inch was cemented at 2,-132 feet at their No. 2 Mooty, Section 22-17-16. Rovenger Corp.'s No. B-4 Goodwin, Section 16-17-16, is drilling at 1,600 feet; No. 4 Graham, same section, had sand at 2,124 55 feet and is waiting for a standard rig, and a rig is up for No. 5 C SE SE. Six-inch was cemented at 2,058 feet at Roxana Corp.'s No. 3 Willet, Section 3-17-16, and No. 4 is drilling at 340 feet. Southern Company's No. B-5 Slaughter, Section 3-17-16, is drilling at 950 feet and location was made for No. B-6 Slaughter, 660 feet east and 200 feet north SW cor. NW SW, Section 3-17-16. On the Unity Petroleum Co.'s Snyder lease, Section 21-17-16, No. 1 to 4 inclusive, are rigs.

Gulf Refining Co.'s was the better of Ouachita County's two completions when No. A-21 Umsted, Section 33 15-15, was finished in sand at 2,358-71 feet for a 75-bbl. pumper. Magnolia Petroleum Co.'s No. 5 Watson, Section 31-15-19, was a 5-bbl. pumper in the sand at 2,161-68 feet.

Six inch casing was cemented at 2,-165 feet at Copenhaven's No. 2 Berg, Section 13-15-17. Gulf company's No. 12 Goodwin, Section 32-15-15, is a derrick. Gulf Company's No. A-20 Umsted, Section 33-15-15, was dry at 3,105 feet and casing is being pulled to abandon the test; A-22 is a rig. Six inch casing was cemented at 2,591 feet at Humble Oil & Refining Co.'s No. 10 Hildebrant, Section 28-15-15. Seventy-seven feet of broken sand topped at 1,969 feet is being bailed to test at W. K. Keever's No. 2 Neely, Section 27-15-16. A rig is up for Lion Oil & Refining Co.'s No. 5 Hays, C SW NE, Section 4-16-15. Casing set at 3,-111 feet at Phillips Petroleum Co.'s No. 1 Tate, Section 9-14-17, is being pulled to set deeper. J. D. Reynolds' No. 3 Ratch and Cartier, Section 2-14-18, is drilling at 1,820 feet. Roxana Corp.'s No. 7 Berg, Section 28-15-15, is drilling at 2,371 feet. Standard Oil Co.'s No. B-11 Murphy, Section 28-15-15, is drilling in gumbo at 2,598 feet. Sun Oil Co.'s No. 2 Hardin, Section 22-15-16, is being swabbed to test sand at 2,268-71 feet. Six-inch casing was cemented at 2,-339 feet at Sure Oil Co.'s No. 4 Snyder, Section 34-15-15. The Texas Company's No. 8 Neeley, Section 27-15-16, was dry with a show of oil at 1,993 feet and is being cored at 2,240 feet.

In the Stephens district, Magnolia Petroleum Co.'s No. 6 Watson, SE cor. SW SW, Section 31-15-19, is a rig. Ohio Company's No. 1 J. M. Curry, Section 32-15-19, is waiting on a standard rig at 2,118 feet. Ohio company's No. 5 T. Hall, Section 31-15-19, is drilling at 740 feet.

Columbia County

Gorden and assicates' No. 8 Jones, Section 36-15-20, is drilling at 1,600 feet, same operators' No. 7 Jones, Section 1-16-20, was completed in sand at 2,232 52 feet making 10 bbls. on the beam.

Nevada County

A good pumping well and a dry hole formed the completion report for Nevada County for the week. Humble Oil & Refining Co.'s No. A-3 Ellis, Section 2-14-21, was finished in sand at 1,156-63 feet, making 140 bbls. on the pump; W. F. Furen and assicates' No. 1 Groves, Section 2-14-21, was dry and abandoned at 1,184 feet.

Autrey Oil Co.'s No. 1 McKinney, Section 9 14 21, cored chalk rock at 1,247 feet and is shut down for orders at 1,-257 feet. Bemis and associates' No. 1 Ellis, Section 2-14-21, had sand at 1,-132-41 feet and is waiting for a standard rig. Humble Company's No. B-2 Groves, Section 1-14-21, is drilling at 275 feet; Southern Crude Oil Purchasing Co.'s No. 1 Waters, Section 2 14 121, had sand at 1,183-89 feet and is waiting for a standard rig. Wright Oil Co.'s No. 1 Groves, Section 12-14-21, is shut down at 945 feet. Zing and associates' No. 1 Moss, Section 12-14-21, had sand at 1,142-48 feet and is waiting for a standard rig.

KANSAS FIELDS

(Continued from Page 50)

Oil & Gas Co. and Christy are rigging up No. 1 Harris, SW cor. SE SW, Section 14-27n-7e; Mid-Kansas Oil Co.'s No. 3 Harris, NE cor. SE NE, Section 22-27n-7e, drilling at 406 feet; W. Neely Oil & Gas Co.'s No. 1 Mulch SE, cor. SE SE, Section 33-26n-3e, is a rig; D. B. Golden is spudding No. 1 Shaw, NW cor. SW, Section 20-26n-7e; Ingold Oil & Gas Co.'s No. 1 Childers, SE cor. NE NW, Section 13-25n-4e, drilling at 749 feet.

Empire Gas & Fuel Co.'s No. 11 Love, NE cor. NW NW ,Section 29-28n-4e, sand at 2,471-74 feet, made 130 bbls. naturally; Allison & Fitzwilliams' No. 3 Kramer, SW cor. SE NW, Section 3-28n-6e, sand at 3,068-74 feet, 200 bbls. naturally; Magnolia Petroleum Co.'s No.

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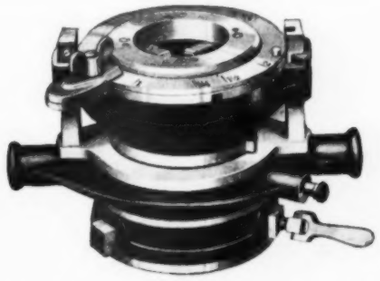

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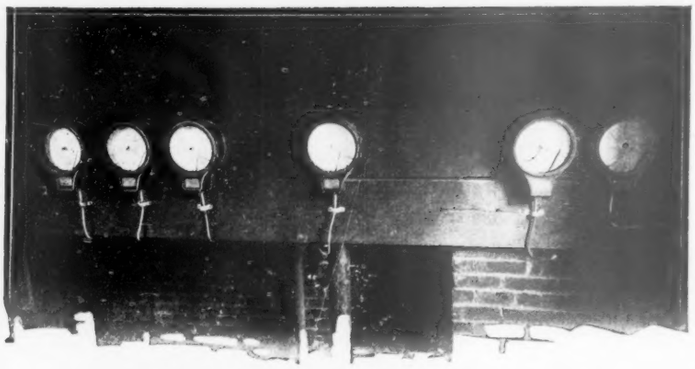

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1 Cotton, SW cor. SW, Section 16-28n-6e, dry and abandoned at 3,164 feet; same company's No. 3 Pettit, SE cor. NE NE, Section 20-28n-6e, also a failure at 3,550 feet; H. H. Patton's No. 1 Seiset, SW cor. NW, Section 14-27n-5e, dry and abandoned at 3,190 feet; Magnolia Petroleum Co. has another failure in No. 1 Clary Shriver, SE cor. SW, Section 34-27n-6e, at a depth of 3,510 feet; Connell Oil Co. and Sheldon's No. 1 Stebbins, NE cor. SE NW, Section 19-27n-7e, dry and abandoned at 2,791 feet.

Greenwood County

Mountain Oil Corp.'s No. 1 O'Byrne, NE cor. SW, Section 12-27n-9e, is a rig; Independent-Harwood-Winters' No. 1 Jackson, SW cor. NE NE, Section 23-25n-8e, drilling at 625 feet; Mid-Kansas Oil & Gas Co.'s No. 1 Huffman, SW cor. SE SW, Section 24-25n-8e, drilling at 450 feet; same company's No. 9 Huffman, NE cor. SW SW, Section 30-25n-9e, is a rig; Osage Oil & Gas Co.'s No. 1 Shell, SE cor. Section 31-25n-11e, spudding; Mission Oil Co. and Moore's No. 1 Moore, SW cor. SE SE, Section 23-24n-9e, is a rig; Polhamus and others' No. 2 Holverson, NE cor. NW NE, Section 26-24n-9e, drilling at 700 feet; Phillips Petroleum Co. is spudding No. 3 Nixon, NE cor. SE SE, Section 25-24n-10e; Skelly Oil Co. is spudding No. 1 Nixon, SE cor. NE, Section 25-24n-10e; Manhattan Oil Co. is spudding No. 1 Edwards, SE cor. NE, Section 35-24n-10e; Ward McGinnis' No. 1 J. Mock, NE cor. NE, Section 36-24n-10e, is a rig; Manhattan Oil Co.'s No. 1 Jacoby, NW cor. NW, Section 17-24n-11e, rig; Ward McGinnis' No. 11 Wiggins, SE cor. SW SW, Section 30-24n-11e, is a rig; same concern is spudding No. 6-C Wiggins, NW cor. SE NW, and No. 3-E Wiggins, SW cor. NW, both in Section 30-24n-11e; Theta Oil Co.'s No. 1 Rockhill, NW cor. NW, Section 31-24n-11e, rig; J. B. Murphy's No. 2 Green, NW cor. NE NW, Section 14-23n-9e, drilling at 1,400 feet; Hazlett and others are spudding No. 3 Teter, NW cor. NE NW, Section 22-23n-9e; Empire Gas & Fuel Co.'s No. 5 Thrall, SW cor. SW, Section 29-23n-10e, drilling at 1,330 feet; George Snyder's No. 1 Baker, SE cor. NE SW, Section 13-23n-11e, is a rig; The Texas Company's No. 1 Burkett, SW cor. NE SW, Section 16-23n-11, drilling at 700 feet; same company is rigging up No. 2 Cased, SW cor. NW NW, Section 16-23-11e; Darby and others' No. 3 McGilvrey, SW cor. NE NE, Section 17-23n-11e, rig; The Texas Company is rigging up No. 1 McGilvrey, NE cor. SE NE, Section 17-23n-11e; Skelly and H. Gore's No. 1 Imthurn, SW cor. NE, Section 4-23n-13e, drilling at 300 feet; Mid-Continent Petroleum Corp.'s No. 8 Dehlinger, NE cor. SW NE, Section 28 23n 10e, rig; and rigging up No. 9, NW cor. SW NE, same section; Empire Gas & Fuel Co.'s No. 15 Kipfer, NE cor. NW SE, Section 11-22n-11e, rig; same company's No. 13 Fromme, SE cor. NW, Section 14-22n-11e, rig; Empire Gas & Fuel Co.'s No. 6 Bartlett, SW cor. NE SE, Section 14-22n-11e, rig; Simmond & Darby's No. 3 Hampe, SW cor. SE NW, Section 14-22n-11e, drilling at 945 feet; Empire Gas & Fuel Co.'s No. 8 Fankhouser, SE cor. SE, Section 4-22n-12e, is a rig; Simmons and others' No. 4 Fankhouser, SE cor. SW NE, Section 4-22n-12e, rig; The Texas Company is rigging up No. 3 Fankhouser, SE cor. NW NE, Section 4-22n-12e; T. K. Simmons and others' No. 7 Holderman, NE cor. Section 9-22n-12e, drilling at 900 feet.

Davis & O'Flaherty's No. 1 Nixon, SE cor. NE NE, Section 25-24n-10e, dry at 2,034 feet; Manhattan Oil Co.'s No. 1 Lozier, NE cor. SE, Section 36-24n-10e, dry at 2,225 feet; Prairie Oil & Gas Co.'s No. 1 Gaffney, SE cor. SE, Section 7-24n-11e, sand at 1,866-85 feet, swabbed 65 bbls. oil and 100 bbls. water; plugging back to 1,882 feet; John W. Start and others' No. 1 Ott, SE cor. SW, Section 13-24n-11e, dry at 1,836 feet; Ward McGinnis's No. 9-B Wiggins, NW cor. SW, Section 30-24n-11e, sand at 1,794-1,824 feet, shot with 100 quarts, 250 bbls.; No. 10-B, SW cor., sand at 1,820-46 feet, shot with 80 quarts, 150 bbls.; Peerless Oil Co.'s No. 1 Garrison, NW cor. NE, Section 33-24n-11e, dry and abandoned at 1,945 feet; Syndicate Oil Co.'s No. 2 Shook, NW cor. SW, Section 6-24n-12e, is a failure at 1,815 feet; Manhattan Oil Co.'s No. 1 McDowell, SE cor. NW NE, Section 12-23n-8e, dry and abandoned at 2,346 feet; White Eagle Oil Co. and McGinnis' No. 2 Morris, NW cor. SE SE, Section 19-23n-9e, dry and abandoned at 2,610 feet; Emerald Oil Co.'s No. 2 Teter, NW cor. SE NW, Section 23-23n-9e, a failure at 2,854 feet; Simmons & Amerada Petroleum Corp.'s No. 3 Ellis, NW cor. NE SW, Section 26-23n-11e, sand at 1,880-1,906 feet, shot with 120 quarts, 50 bbls.; Parish and others' No. 1 Dorris, SW cor. NW, Section 16-23n-13e, sand at 1,764-1,823 feet, shot with 80 quarts, 8 bbls.; J. H. Day and others' No. 4 Fuller, NE cor. SE SW, Section 1-22n-10e, sand at 1,980-2,014 feet, shot with 140 quarts, 100 bbls. Syndicate Oil Co.'s No. 4 Fuller, SW cor. NW SW, Section 1-22n-10e, sand at 1,980-2,037 feet, shot with 240 quarts, 400 bbls.; Manhattan Oil and others' No. 1 Sheppard, SE cor. SW SE, Section 2-22n-10e, sand at 2,062-2,140 feet, shot with 260 quarts, 350 bbls.; Empire Gas & Fuel Co.'s No. 11 Atyeo, NE cor. SW, Section 6-22n-10e, sand at 2,278-83 feet, shot with 40 quarts, 40 bbls.; Phillips Petroleum Co.'s No. 2 Green, SE cor. NE NE, Section 11-22n-10e, sand at 2,080-2,151 feet, shot with 220 quarts, 100 bbls.; same company's No. 8 Warrensbert, NW cor. NE SW, Section 12-22n-10e, sand at 2,078-2,122 feet, shot with 160 quarts, 100 bbls. The Texas Company has abandoned the rig for No. 9 Prather, NW cor. SW SW, Section 29-22n-10e. In the same section, Tidal Oil Co. has abandoned location and timbers for No. 18 Prather, SE cor. NW; Empire Gas & Fuel Co.'s No. 9 Hind, SW cor. NE SW, Section 11-22n-11e, sand at 1,856-78 feet, shot with 100 quarts, made 80 bbls. of oil and 20 of water; Empire Gas & Fuel Co.'s No. 7 Fankhouser, NE cor. SE SE, Section 4-22n-12e, sand at 1,826-32 feet, shot with 40 quarts, 25 bbls.; Simmons and others' No. 6-B Fankhouser, NE cor. NW SE, Section 4-22n-12e, sand at 1,790-1,820 feet, shot with 160 quarts, 200 bbls.; No. 10-B, SE cor. NE SE, dry and abandoned at 2,100 feet, no sands; Phillips Petroleum Co.'s No. 3 Gardner, NE cor. SE, Section 5-22n-12e, sand at 1,863-1,911 feet, shot with 40 quarts, 10 bbls.

Rice County

Prairie Oil & Gas Co.'s No. 2 Walstein, SW cor. NE, Section 2-21n-6w, drilling at 700 feet.

Lyon County

Super-Six's No. 4 Rossillion, SW cor. SE, Section 24-21n-10e, rig; Transcontinental Oil Co.'s No. 10 Atyeo, SW cor. NE SW, Section 30-21n-10e, rig; Chris Sheedy and others are rigging up No. 14 Atyeo, NW cor. SE, Section 31-21n-10e; Transcontinental Oil Co.'s No. 8-A Atyeo, NW cor. SE NW, rig.

Chris Sheedy and others' No. 13, NE cor. SW SW, Section 31-21-10, a failure at 2,435 feet. Transcontinental Oil Co.'s No. 7-A Atyeo, SW cor. NE NW, Section 31-21n-10e, sand at 2,163-2,210 feet, shot with 80 quarts, 65 bbls.

Chase County

Empire Gas & Fuel Co.'s No. 1 Whitney, C SE NW, Section 19-18n-7e, spudding; it is also spudding No. 1 East Kansas Land Co., C NE SW, Section 31-18n-7e.

Empire Gas & Fuel Co.'s No. 1 East Kansas Land Co., C SE NW, Section 29-18n-7e, sand at 1,105-61 feet, shut in for 5,000,000 feet of gas; Ritchey & Moore's No. 1 Scarlet, NW cor. NE, Section 32-18n-10e, dry and abandoned at 2,335 feet.

ASK ARGENTINAN CONCESSIONS

NEW YORK, Sept. 10.—A report received from Buenos Aires today states that President Alvear has handed in for consideration of Congress 220 petitions by domestic and foreign concerns for concessions to exploit and explore oil lands in the national territories of Santa Cruz, Chubut and Neuquen.

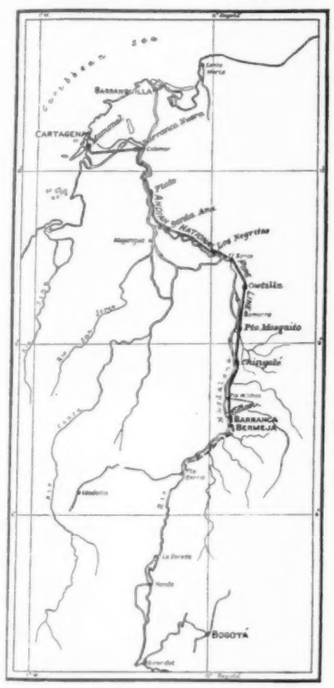
OVERCOMING TROPICAL OBSTACLES DESCRIBED

(Continued from Page 38)

ery town, is also a central station, and from all bulk stations, placed at strategic points on the transportation arteries of the country, case and can goods are distributed to interior points, usually by the short-line railways which penetrate the upper country, but quite frequently by packtrain, over the mountain trails.

Colombia's Great Future

From a transportation standpoint, Colombia is just on the eve of an epochal development. The Magdalena River, with its mouth at Barranquilla, on the Caribbean, is and has always been the main artery of travel. The mouth of the river is so shallow that it is impossible for ocean steamers to go above or river steamers to go below the estuary. A large program of dredging is now under way and this bar to cheap transportation, it is hoped, will be removed in the not distant future. Meantime, and for many years past, all freight for up river and for export is portaged across country between Cartagena, on the Caribbean Coast, and Calamar, a point about 50 miles up the Magdalena River and from Puerto Colombia to Barranquilla, a distance of about 12 miles, also on the river. Another portage railway is that between La Dorada and Beltran, on the upper river,



Route of the new Colombian industrial artery.

where a short stretch of track has been constructed to connect the navigable stretches of the river above and below a set of rapids which constitutes an otherwise insurmountable barrier.

Railway transportation consists of a set of short lines operating independently of each other which serve to bring the products of the highland country, principally coffee and hides, to the Pacific Ocean, the Caribbean Sea and the Magdalena River. Several efficient railways are owned and operated by the Government. The high mountain ranges and difficult construction has been responsible for the dispointed nature of these various railroads, Bogota, the capital, for instance, being situated on a plateau 9,000 feet above sea level. The present objective of the Government is to co-ordinate the disconnected sections into one unified system giving through connection from Cartagena on the Caribbean to Buenaventura on the Pacific.

Effects on Transportation

Not the least important factor contributing to this possibility is the present availability of oil fuel, due to the operations of the Tropical Oil Co. Formerly all railways and steamboat lines in Colombia were dependent on wood for fuel. Its inefficiency on the heavy mountain grades and against the swift currents of the Magdalena made transportation of the country's products an expensive and precarious undertaking and fuel oil has done much to solve transportation problems. Transportation is, however, still one great problem of Colombia. It has been estimated by Government officials that at least one-third of those gainfully employed in that country are engaged in moving the country's products to market or bringing imports back to the consumer. Oil is very rapidly changing all this. Not only has oil fuel made the railways vastly more efficient but it has materially increased the carrying capacity of river transportation. Gasoline in passenger cars and trucks throughout the country has set an entirely new standard of travel and haulage and has engendered a new era of highway construction to serve plantations and heretofore isolated ranches with automotive communication at a mere fraction of the cost of the slow-footed mule train. There are at present about 20,000 automobiles and trucks in Colombia and their number is being rapidly multiplied.

On the river the Tropical Oil Co. owns and operates five river steamers—the largest modern fleet—and a sixth is now being built for the service at the Sun shipbuilding yards at Chester, Pa. This boat, which is typical of the requirements of the service, is 190 feet long, 44 feet beam, 3 feet 3 inches draft and with 750 horse power engines. The steamers carry oil products from Barranca down river to Calamar and way ports and supplies back up to the oil field.

Colombians Adaptable

One outstanding feature of the Tropical Oil Co.'s activities is the surprising adaptability of the Colombians themselves. When it is taken into consideration that five years ago the only oil in the country was that imported at great cost from outside, while to the great percentage of the country's 7,000,000 population the use of oil was entirely unknown, the present development is little short of amazing. In the production, refining and distribution of oil, the Colombians have shown wonderful adaptability. In the field, those employed about the derricks are making rapid progress toward mastering the drilling science and it is anticipated that within a very few years much drilling will be performed by native Colombians. In the refinery they have shown a surprising capacity for the mechanical departments. In the case and can factory, where the cans are turned out by intricate and powerful machinery, the entire personnel is now Colombian. On the river they are in their element. All steamboat men, with the exception of the chief engineer, are Colombians. In the sales branch, which has been recruited largely from the banks and mercantile institutions of the country, only Colombians are employed and their accuracy and adaptability is a matter of record, their performances absolutely annihilating the fiction that residents of the tropics are unanimously somnolent and careless.

Colombia is a progressive country, rich in natural resources, with magnificent cities and a stable and progressive government. Its imports and exports are mounting rapidly, its program of railway and road construction is opening the country up to development and every signal points to an era of expansion and activity in which petroleum bids fair to be an important factor. Colombia also has a stable currency and a Federal Reserve bank patterned after the United States Reserve Bank which was instituted on the advice of Professor Kemerer who was called in by the Government.

Until July this year no attempt was made to export oil from Colombia, although the product from the Infantas Field was brought to the coast and distributed to supply the requirements of Cartagena. Now, however, with the Andian pipeline completed, oil from the Co-

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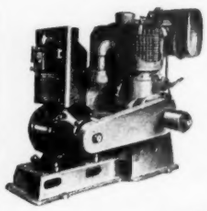

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lombian Field is flowing into the markets of the world at the rate of 30,000 bbls. a day, marking a new dispensation in the oil affairs of South America and placing Colombia on the map as one of the major producing countries.

The First Cargo of July

In the first week of July, 1926, the tanker T. J. Williams cleared the port of Mamonal, Colombia, South America, with a cargo of approximately 80,000 bbls. of crude oil for the United States. An every day occurrence, this, in many other petroleum ports, but at Mamonal it marked the completion of a chapter in the industrial history of Colombia, which will find a place among the epochal events of that opulent and colorful republic. The cargo was the first consignment of petroleum by the Tropical Oil Co. from the hinterland of Colombia, transported to tidewater through the 360-mile pipeline of the Andian National Corp. and thence on its way to the waiting markets of the world. With the dispatch of the tanker, an undertaking representing the most formidable task confronting the petroleum industry—the development of a commercial oil field in a tropical country—was accomplished. It was the fullfilment of the plans of the two corporations mentioned, the first American and the second Canadian, which have been years in the execution and which have conscripted the genius, capital and courage of their respective staffs on a scale not often equalled in that most venturesome of all human enterprises—the oil business.

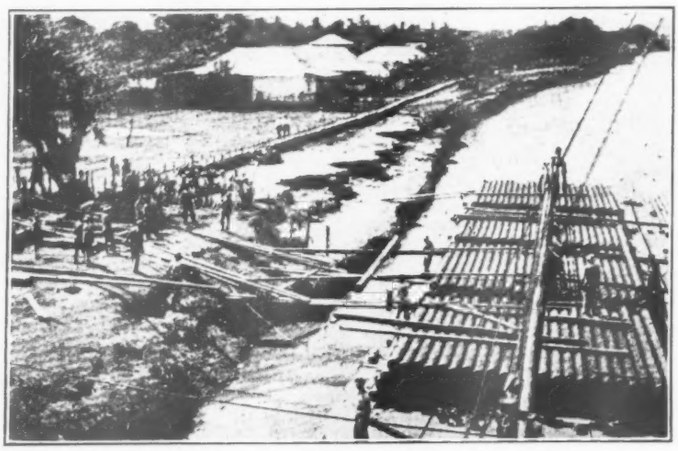
Speeding Up Transportation

In 1920, there were two ways of getting from Barranca to Infantas; one was the log-choked Colorado River and the other over a narrow trail on muleback through the jungle. By either route it was a hard day's trip, if this could be made in one day. Now with the railroad and the fine automobile road, it is a matter of a comfortable journey of an hour and a half. From Infantas to the location at Dos Bocas, it required four days' journey on muleback over an indescribable trail in wet weather, whereas now one can easily motor it in an hour and a half. This transformation and its equally difficult maintenance was only secured as the result of huge expenditure, hard and well-directed work and efficient administration.

Operations in an oil field are absolutely dependent upon transportation; and this had to be established from the coast 400 miles inland to Barranca and thence through forest and jungle to the field itself. River transportation available was by no means sufficient for the tremendous needs of the Tropical Oil Co. and this lack of adequate facilities necessitated heavy expenditures. The company has built and operates a river fleet with five power boats and a dozen or more barges and has organized a system of land transportation embracing 20 miles of railroad, a hundred or more kilometers of automobile roads and a fleet of trucks, tractors and passenger cars. This equipment is paying dividends every day in wells which are being completed at the rate of more than one a week.

Governmental Aid

Linked up with this transport system is a series of distributing stations along the Magdalena River and elsewhere which, in addition to carrying on its huge exploratory program at Infantas, the company constructed for the purpose of giving the consumers of its products in Colombia a more efficient service as well as cheaper gasoline, kerosene and fuel oil. In this, as in other matters, it enjoyed the co-operation of the Colombian government and people who have throughout endeavored to make the task as easy as possible. They recognized that the success of the company's efforts meant the advancement of the country and that the only logical spirit was one of equitable and reasonable teamwork between all parties for the general good. In this internal distributing system, the company has erected a dozen or more tanks and warehouses at strategic points along the Magdalena River and in various cities of the republic where ample supplies of fuel oil, gasoline and kerosene are stored. These deposits are maintained at all times and increased somewhat at the beginning of each dry season when transportation by river becomes precarious and sometimes impossible. By means of these stations and its fleet of river steamers and launches the Tropical Oil Co. has, at great expense, been able to efficiently supply the rapidly increasing needs and demands of the Colombian public and to take its part in the advancement of the republic.



The last stage of a long journey of pipe made in Lorain, Ohio.

Credit to Sanitary Science

The development of the oil fields, and the construction of the refinery at Barranca by the Tropical Oil Co. and later the laying of the pipeline by the Andian National Corp. would have been impossible 25 years ago. So great has been the advance in sanitary science in that period, however, and so efficient were the medical services provided by the companies that a remarkable record of freedom from casualties—by disease or accident—was obtained. The sanitation squads, under the direction of highly skilled experts in tropical conditions, were first in the field and, with the keen interest and aid of the Government authorities in the work, not only successfully combated infection, but wherever possible endeavored to improve the general health of the communities through which they passed. At every stage the progress of the gigantic engineering feats depended upon the medical departments and no worker, native or foreign, was long out of touch with a modern hospital or without medical supervision.

The most essential factor in the sanitary program was the provision of adequate hospital accommodations in order that all sick might be properly treated and isolated. These hospitals were far from the ordinary construction camp type. There were hospital ships on the river and hospital buildings at the centers, admirably equipped, and medical at-

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Will pay monthly dividend of 1½% to Preferred Shareholders on September 30. This is Dividend No. 72, and makes a total of 128½% paid to shareholders.
E. S. HORN,
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333 Mayo Building, Tulsa, Okla.

tention was not only available but with the support of the Government authorities it was made compulsory.

To transport men, equipment and material to the construction camps required the inauguration of a transportation system somewhat similar to the craft that plied the Mississippi River in steamboat days. These tropical craft were necessarily, however, lighter of draft, more strongly engined and a stouter construction. Before the pipeline was begun steel steamers, powerful and magnificent were plying the river, the jungle was pierced with a system of wagon roads and meter-gauge railway, the refinery and a model town already in existence, the oil field explored and drilled to a stage at which there was in sight a shut-in production of 50,000 bbls. a day with potentialities for a much greater production throughout a large area now known to be oil-bearing.

Andian Pipeline

D. O. Towl, an outstanding member of a famous family of pipeline engineers and an executive of the company proved invaluable in the general work of superintending the laying of the line. In co-operation with him, M. M. Stuckey, chief engineer of the Andian National Corp., carried through the entire campaign of construction. Mr. Stuckey's experience in pipeline construction in the United States equipped him with a comprehensive grasp of the business and that he required a thorough working knowledge was subsequently proven as the work advanced.

It was in the latter end of 1921 that Mr. Stuckey arrived on the scene with a corps of engineers to make a reconnaissance survey of the tentative route. The proposal, as subsequently carried out, was to follow the river in a general way from Barranca down to Calamar, and thence across country, following the general direction of the railway, to the terminal at Mamonal, 10 miles from Cartagena.

Penetrating the Jungle

Debarking at Barranca this corps of engineers struck off into the jungle. Upon them there fell probably the most strenuous experience of the entire program. In these latitudes 80 in the shade is cool weather. An inch of rainfall in 24 hours is merely an incident. Five to six inches in a day is not uncommon. The tropic growth is almost explosive in its rapidity. The malaria-carrying mosquito must at all times be guarded against. To the stranger the jungle presents dangers of boas, coral snakes and rattlers that are often enough real to keep his nerves on edge. Add to this a terrain that is worn away on no systematic plan whatever, into a series of precipitous bluffs and yawning gulches, jungle screened so completely that the explorer finds them most often by falling down their slopes. Nor did these argonauts enjoy the comparative permanency of abode that dignified the later construction camps. On the river they had house boats and moved down stream as the survey progressed. Ashore they used tents. From day to day they were on the march. For the first 150 miles the country is jungle in the tropic sense of the word. After that, for the next 150 miles it is in some places tropic swamp but easier going and, after leaving the river at Calamar it is, as stated, comparatively open country. Following the reconnaissance came the location surveyors who, with their helpers, platted and cross-sectioned the country, cut the line, drove the stakes and put the details down on graphic and methodical blueprints for all sufficiently educated to understand.

In the latter part of 1922, just about a year after commencement, the surveys had been completed. Then there came a halt in the field operations while the diplomatic corps was engaged and the questions of property rights and damage were being adjusted. By its corporate powers the company had something similar to the right of eminent domain under which railways and other public utilities operate in North America, but, lacking the system of settlement by arbitration which the experience of a century has developed in this country, settlement in every case had to be by personal treaty.

60,000 Tons of Material

The order for the pipe was placed January 1, 1925, and the first shipment left the mills at Lorain, Ohio, on February 3. Pumping equipment included, 60,000 tons of material went into the construction of the line. The pipe is 10-inch, 41 pounds, with a tested pressure of 1,000 pounds running 110 tons to the mile. There are eight pumping stations on the line with suitable tankage at each station. Coupled joints were used throughout, as welding them would have called for a much larger importation of labor. The entire line is built of 20-foot lengths instead of the 40-foot pipe usually employed in the United States, principally because of the inconvenience in handling the larger sections.

The first cargo of pipe arrived in Cartagena in March, 1925, and construction was commenced from the coast end without delay. On April 4, the first joint was laid. Starting from the terminal, construction was carried out in sections and as each one was completed the gang moved to the head end to start on another. The 60 miles from Cartagena to Calamar, on the river, presented no great difficulties and were soon complete. However, from Calamar up the river, especially the last 150 miles through the jungle country many obstacles were encountered.

The Andian operators chartered some of the available river steamers. Barges for freighting the pipe were built, each with a capacity of from 300 to 500 tons contingent upon the state of the water in the river. Two barges to the steamer was the usual tow and in that fast-running and ever-changing river careful and competent navigation was required to get the material to the desired point up stream. Stations, or "deposits" as they were termed in that country, at the most convenient points along the river were designated by the engineers and at these the pipe and supplies were put ashore. At some points the banks were steep and the job of elevating the lengths to the bench land was strenuous to a degree. From the "deposits" the pipe was freighted on 8-wheeled or truss-wheeled wagons, by tractors, usually over roads built for the purpose, to the places along the right of way where it was strung out for coupling as a part of the line.

Hand Labor the Cheaper

Taking into consideration the cost of transporting trenching machines to the scene of operations and the additional cost of moving in a difficult country, it was estimated that hand work would be cheaper. Labor was plentiful and willing. Day labor was employed to some extent but, generally speaking, the system adopted was something more like the station work in vogue on railway construction in the old American west. For a certain piece of work a certain price was paid. The workman was, in a small way, a contractor and his own boss.

At its maximum the construction force consisted of about 3,000 Colombians and 250 North Americans. As far as possible, house boats were used to accommodate the field force. These house boats were steel barges, fabricated in Pennsylvania and put together on the river bank at Calamar. A superstructure of wood converted them into floating hotels, with modern plumbing, baths, electric lights and the culinary equipment of a summer resort. So long as the crew could stay on the river it was fairly comfortable. Ashore, the housing equipment consisted of tents and small portable structures such as were easily moved as the army of construction advanced. Usually, a board floor was made necessary by the spongy nature of the soil and the greatest anxiety of the medical department was to ensure that the mosquito guards were efficient and in working order.

Unbelievable Problems

The various crossings of the Magdalena and other streams presented unbelievable problems. At some points it was possible to couple up the pipe and tow it across stream, but in the wide reaches where this was out of the question a specially

(Continued on Page 143)

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FOR LEASE—8,000 acres by owner, in the famous Owensby Basin in the midst of the State Oil Reservation on the Cimarron River in Cimarron County, Oklahoma, in Townships 5 and 6, Range 7; gas and showing of oil near, and wells to be drilling all around it soon; $5 bonus and $1 rental on commercial lease or $2 bonus on drilling contract 10 months. Seven-year lease; a snap; if interested wire me at once. Dr. O. M. Owensby, Pittsburg, Kans.

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10,000 ACRES solid West Grenada, Mississippi, for well. 2 years free; 25-cent rentals 3 years, good geology. L. L. Peeples, Grenada, Miss.

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HAMILTON HOTEL, LAREDO, TEX.

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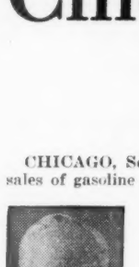
Chicago Expects No Material Change

Statistical Position Favorable to Sustained Market. Demand Dependent On Weather. Price Situation Obscured

By J. B. Waldo

CHICAGO, Sept. 11.—After the large sales of gasoline last week, and the week previous, the expectation had been that business would be less than during these weeks preceding Labor Day. Unfortunately the weather upset these calculations. Just how much the gallonage was reduced by weather conditions is a question but it was considerable. The result has been a restricted demand with some pressure to sell from refiners but it is believed the bulk of the offers of Motor gasoline at less than the market price come from short sellers who see an opportunity to use their usual tactics of forcing the market down to cover their sales made at something less than refiners have been willing to quote. The strength of the situation comes from the fact that is generally admitted stocks of gasoline are light in the Mid-Continent Field and it is too late in the year for refiners to indulge in reckless running in expectation of better prices later. It is possible better prices may prevail. In fact the opinion is freely expressed that if the business of Labor Day had been up to expectations, the market today would be 11¾ to 12 cents. Jobbers in the country are well ordered ahead. The bulk of the large business done during last week was for delivery this week and later. It is chiefly the jobbers with small storage that are in the market today for supplies. These may be quite numerous but their orders are not large.



Price Situation Obscure

The gasoline price situation is still rather obscured by the conflict of interests. Refiners quite generally are trying to hold for 11¼ cents for Motor gasoline. Some that had advanced their price to 11½ cents have come down to 11¼ cents and there is some gasoline available at less but it is not as yet generally offered by refiners at less than 11¼ cents to the trade while the Tulsa market is quoted at 11 cents for resale. One selling organization better known for low prices quoted than for quality of product delivered, has broadcast a price of 10⅞ cents but jobbers with this price before them have placed orders with their regular source of supply at 11¼ cents without demur. Several refiners when asked their ideas, stated they were so closely sold up on motor gasoline they were dependent on their daily runs for filling their orders and saw no reason for reducing their prices until there was some indication a change was necessary. In some cases the sellers have taken the bull by the horns and have made a price of 11 cents but the tendency is to await developments. Jobbers ordered freely for Labor Day and for delivery after Labor Day to replace the sales on that day. The sales were not up to expectations and they have some of the Labor Day supplies on hand with the gasoline ordered for later delivery still to be unloaded. How fast they will be able to dispose of these supplies and when they will come into the market for more gasoline depends very much on the weather. Given good weather the statistical position is so favorable to a sustained market that many oil men still believe there will be no material change during the present month, at least no sudden slump.

The demand for the super gasoline or anti-knock motor fuel is growing with the approach of cold weather. There are jobbers who are really worried by conditions and very anxious judging from their talk to connect with a good line of this product. It is the most-discussed topic at state meetings and the national organizations plan to give it the first place at the coming fall conventions. So far neither the Standard nor the Roxana have brought out anything new in this line. The Standard has its "Solite" and its "Ethyl" gasoline, both of which are super gasolines and possess anti-knock qualities. Barnsdall, Cosden and Marland have each brought out gasolines that compete for public favor and are securing it to a marked degree according to the showing of the sales sheets. The former grades of high-test gasolines are little called for except for some special districts. Prices are easy for these and very close together. For the 60-62 400 and the 64-66 375 offers have been received from refiners to sell at the same price although a slight range is maintained in the quotations. The purchases of The Texas Company have been of the 60-62 400 endpoint and this has given the gravity a strength that is lacking for the higher grades, although there is some demand from Canada and the Northwest for the product. Natural gasoline is quiet here and the market is quoted as not so strong in the field.

Kerosene Not Active

Kerosene is not very active so far as new business is concerned. The chief activity is in securing deliveries of orders placed last month. Refiners, however, are getting in better shape, catching up on orders and about ready to accumulate some stocks. The usual price is 9½ cents for 41-43 kerosene. Some refiners are asking their customers 9¾ cents and getting that price on occasions when prompt delivery and high grade goods are assured. At least one large sales agency is offering a price of 9¼ cents if the kerosene order is accompanied by one for gasoline. This would indicate the refiner had more kerosene and gasoline than he liked and was making one sell the other. The price named for the gasoline was 11 cents on this combination trading.

Distillate Demand

Distillate demand is growing week by week and sales are growing for furnace oils of all kinds. One of the special conveniences of the oil burner is that it is so easily started and stopped it can be used for temporary heating when it would be too much trouble to build a coal fire. We have had some chilly evenings and morning in this territory the past two weeks to say nothing of the excessive humidity and there has been a call for a first filling of the tanks by many consumers. Their takings now may last for a couple of months but they want some oil and quite a number of distributors have been surprised at the demand. Some were not prepared for it and have sent in hurry-up orders. There is the not unusual fact of an advancing refinery market with distributors making lower prices to the consumer. At the meeting of the Chicago distributors this week the question was raised as to the price each was securing for distillate and quite a number stated they were contracting at 9 cents per gallon. The present tankwagon price is 10 cents for quantities under 100 gallons, with ½ cent less for deliveries of 100 to 399 gallons and 1 cent less for deliveries of over 400 gallons. There would be few deliveries at over 9½ cents even if the scale was maintained. There has been no straw distillate available in any quantity at any time this summer at less than 4½ cents and the present market for a 38-40 straw distillate is 5¾ cents. According to this, oil bought at the first-named price f. o. b. Group 3, would show a gross profit of 2.12 cents and at the higher price of 0.87 cents per gallon. At the former, a distributor might get by, but not at the latter. The situation is becoming settled in a way. Most distributors have made some sort of a contract for their supplies. Some have been able to make a fairly good contract as to price and some have only the agreement to deliver at the market. Several of the larger sources of supply last winter are not selling at all now and say they will have no distillate this winter but a high price might prove tempting. Should the winter be as cold and snowy as the summer has been wet and chilly by comparison with ordinary seasons, the possibility is some dealers, large and small, will find the demand in excess of the possibility to fill it and prices will strengthen accordingly. There are several local distributors that have cut out the distillate business and will handle nothing lighter than gas oil this season.

Gas Oil Unchanged

The gas oil market shows little change. There seems to be an increase in the supply, at least the offerings are larger. There are so many grades of gas oil now compared with the former practice at the refineries that the market is mixed by the very variety of offerings. Some jobbers who want a gas oil for domestic burners will specify a straightrun reduced gas oil and they have to be told such a gas oil would have a high cold test that would cause trouble. For the jobber who has not much experience in the sale of burner oils it would be the safest plan to tell his source of supply the purpose for which the oil was intended and let the seller ship what was best suited to the use. In a general way there are abundant offerings of dark cracked or blended gas oils and these are quoted at 4¼ to 4½ cents as the top range. Then there are the straightrun or uncracked gas oils which are wanted by refiners with cracking plants and these will bring from 4⅜ to 4⅝ cents. The lighter colored oils command a better price than the dark oils as a rule, the feeling being they were cleaner and carry less sediment. The demand is still largely of the hand-to-mouth order. Some buyers have taken in some supplies, others have not and this applies to all grades of users, utility companies, domestic distributors and industrial consumers. There is a fairly steady tone to the market but some believe the supplies will be larger later on.

Fuel Oil Strongly Held

Fuel oil is still strongly held by refiners but sellers here report it is hard to sell any quantity to one buyer. As with gas oil, some users have bought for storage but the bulk of the movement is for immediate consumption. There is a good inquiry for contracts over the winter but there is little agreement or possibility of agreement between buyer and seller in the present condition of the market that can result in the making of such contracts. Some buyers, and they are all watching the market closely, are encouraged in their belief they will be able to buy at lower prices a little later, by the reports of important increases in production which they argue will force lower prices for crude. Reductions in crude prices after the gasoline demand is beginning to fall off are common but they do not necessarily cause lower fuel oil prices.

The real influence on fuel oil prices is the supply and demand. Has the introduction on a larger scale of the cracking process reduced the volume of fuel oil run and is the supply of the oil materially reduced in volume? That there has been a change in the characteristics of the fuel oil is evident. The lighter gravities are no longer available in quantities, if at all, being used for cracking stock. There is an increased supply of the heavier fuel oils offered as compared with former seasons. To burn this heavier oil successfully is no great problem. It means simply preheating and more air to thoroughly atomize and break up the oil. When the oil can be used readily it gives more heat and users of fuel oil for industrial purposes should realize that the higher gravities are to be scarce and will cost more and arrange their equipment to burn the heavier grades. After all is said, fuel oil is still a cheap fuel and has decided advantages over coal. Some coal men or their salesmen have developed a new argument against fuel oil, more particularly against the use of oil for home heating. They tell their customers who are considering or have about decided to install an oil burner that if they are willing to pay for the luxury of an oil burner they should consider gas which is much better than oil and costs but little, if any, more now and as the cost of oil increases will actually cost them less. There has been a fairly large and steady demand for fuel oil during the week but the bulk of the business is for immediate use and the cases where a buyers has stocked ahead or has made a contract for his future needs are few and no large deals are reported, locally at least.

Fuel Oil Prices

The present price of a 24-26 fuel oil is very close to $1.50 per barrel. A buyer might succeed in buying at $1.47½ and he might have to pay as high as $1.52½ depending on conditions. The higher gravities are scarce and proportionately high sales have been made of 26-30 fuel oil in small lots at $1.65. The heaviest grades such as a 14-18 refinery fuel oil, a cracked product, cannot be bought under $1.35. The Smackover market is firm for a treated oil at $1.30 and the statement is made that this is as low as a treated oil can be sold. There have been some sales of Smackover reported at $1.25 and some oil is being delivered on contracts that is costing the buyer $1.22½ but this is stated to be untreated oil or even oil that has been stored in pits and has a large amount of water and refuse and is not suited for the general purposes to which such oil is put. Regarding the quantity of fuel oil left after a run through a Dubbs still a refiner stated the crude he ran would give him about 60 per cent of topped crude after his first distillation and that from this 60 per cent of the original crude charge he could run profitably at the present time 40 per cent of good commercial gasoline. He stated that with gasoline selling at the present market it did not pay to continue the cracking further. It could be done but the quantity of gasoline resulting was too small to make it pay to continue the process.

Lubs in Demand

Lubricating oils are still in demand although the business in motor oils is naturally showing some falling off as distributors are allowing their stocks of motor oils to run down and are ordering for the most part in smaller quantities than they would do earlier in the season. Refiners are about caught up with their orders. Generally the market is quiet but prices are steady. The industrial demand is somewhat larger locally and reflects the growing industrial activity as the manufacturers increase their output to care for their fall business which still promises to be very good.

Tankwagon Situation

There has been no change in the tankwagon scale in the territory of the Standard Oil Co. of Indiana and none is expected in the near future. Some of the

most careful if not pessimistic of the local industry say the conditions back of the situation such as limited stocks, current good demand and the like are such as to make any decline in the prices to the consumer very unlikely. There is some price cutting in sections but it is not general and does not show signs of increasing. It is generally of the local type caused by some distributor making a lower price for a larger share of the business and the cut spreading gradually to other distributors and to near-by towns. The larger distributors do not find that the result of this price cutting is sufficiently important to warrant a general reduction over the territory where prices and profits are more nearly normal than they have been for years at this season. A crude cut would probably cause a general adjustment of prices but there is little thought here there will be such a cut during the next several weeks. As the trade sees it the condition is fairly stable and not one where a reduction in prices in any department is at present warranted or would be advisable. Jobbers are not induced to buy more gasoline by price concessions. They buy what they believe they can sell.

SHREVEPORT MARKET REPORTED TIGHTENING

SHREVEPORT, La., Sept. 11.—The tightening of the gasoline and kerosene market the latter part of the week was the feature in refined markets during the past week while little change was noted in other products. Gasoline and kerosene were steady and firm the first part of the week and Thursday started showing additional strength that was manifest at the close of the week.

At the end of the week, one refiner was a day and a half behind with gasoline and sold out on kerosene. Another was rapidly cleaning up stocks while all others were barely able to keep up with orders. Most of the business was going to the trade in the territory, although some of both products was being taken by Oklahoma and Chicago buyers.

A heavy consumption of gasoline during the Labor Day holidays brought about the increased demand in the territory. Practically all of the jobbers' stocks were absorbed and gave the refiners the opportunity to place themselves in a firmer position.

Grade C natural gasoline in north Louisiana strengthened with U. S. Motor gasoline and advanced fractionally in price. Grade C has held a steady market for several weeks. However, close students of the natural gasoline market expect it to soften slightly in the near future, pointing out the demand was not as brisk the week end.

Gas oils, while strong, showed a tendency to weakness. The price remained firm and the products moved steadily but inquiries were not as numerous as the week before. Distillate remained strong with one refiner selling for 6 cents for resale. Fuel oil was steady.

In Arkansas, refiners were not as optimistic as Shreveport refiners and were not being flooded with inquiries for gasoline. Gasoline was moving only fairly steady in that quarter. Kerosene was strong and little available while all other products remained the same.

OIL IN COUNTY CORK

An oil well, from which oil is obtainable by merely lowering a bottle, has been discovered in County Cork, Ireland, says the Oil and Color Trades Journal. The well is situated some 20 miles from Cork City. It appears that a few years ago the owner of the land, looking for a water supply, sunk a well and found water, but owing to the oily nature of the water obtainable from it and the presence of rock, the well was abandoned and left unused. It is now coming very much into the limelight and will no longer be left derelict. Several samples of the oil taken from the well have been sent to the authorities in Dublin to have them examined, analyzed and reported on.

EASTERN MARKET IS OPTIMISTIC; NEW CONTRACTS WITH CALIFORNIA

By N. O. Fanning

New York Bureau, The Oil and Gas Journal, 30 Church Street, New York

NEW YORK, Sept. 11.—The Atlantic Seaboard refined oil markets continued firm during the past week. Consumption of gasoline and lubricating oil suffered somewhat from unfavorable weather. Nevertheless, there was no evidence of increased price-cutting in the territory, and the situation does not seem at all weak.

The outstanding factor in the market is the entrance of Pacific Coast products into the Atlantic Coast situation once more, on an important scale. Indications now are that twice as much California oil will be sold here during the next few months as during the same period of 1925. New contracts have been entered into, and the movement is now just starting.

The reason for the influx of California oil is obvious. The California market offers the cheapest source of refined products in bulk at the present time. Gasoline, kerosene and fuel oil prices are below both the Gulf and Atlantic Coast markets. California gasoline, fuel oil and crude has entered into the eastern situation all this year, but so far, little kerosene has been shipped through the canal. It is now understood, however, that eastern marketers are feeling around for California kerosene, and that some contracts may be made at advantageous prices.

Marketers here are chiefly interested in the effect this will have on eastern prices. This will also affect the Mid-Continent price situation, so that the matter concerns the entire oil industry.

Still Optimistic

A canvass of the territory reveals no real alarm over the possibility of California competition. The belief is expressed generally that this movement will serve to clean up the surplus now in stock on the Pacific Coast, and that when this is further accomplished, the last "loose end" of the oil business will have been gathered in, and the general situation will show marked improvement. In other words, they believe as soon as the local markets become adjusted to this competition, a general price advance will be in store, for all important products.

While California prices have been below those of the eastern markets, it is believed that when the comparatively small surplus has been fully contracted for, new business will be done at higher prices. Therefore, the trade here is awaiting a possible stiffening of quotations on the Pacific Coast, covering gasoline, kerosene, fuel oil and crude.

It may be possible that for a time prices here will be slightly affected adversely, but that this will be only for a short period. But the consensus is that no weakness whatever will occur in the eastern markets.

Gasoline

While some price cutting was reported from upper New York State, the situation in the Atlantic Coast cities, where the bulk of the gasoline consumption takes place, is very firm. It is much better than a year ago. Tank car offerings are light, and refiners here are not quoting spot gasoline, having no more than enough to serve their own customers.

Kerosene

Kerosene demand is improving steadily. Furnace oil is also in good demand and the price is firm at 12 cents a gallon.

Gas and Fuel Oil

The gas oil market holds steady, with increased inquiries. The belief is now quite general that an advance in gas oil, and all grades of fuel oil, will take place shortly.

Lubricating Oils

The market for lubricants is steady. Considerable improvement has taken place in spindle oils, a department which has been behind for several years. This is due to a revival in the New England textile trade. White neutrals are moving briskly. Heavy inquiries have been reported for cylinder oils.

Paraffin Wax

The wax market is mixed, with a slackening off in some departments offset by gains in others. Lower melting points are holding best.

Petrolatum

The petrolatum market continues to improve slowly. Snow white and lily white are more scarce, and bids are slightly higher on these grades. Dark green, however, has shown no perceptible gain. It is still available just below 2 cents a pound.

Export Market

The oil export market here is holding fairly well. The feature continues to be minor products, such as asphalt, coke and greases. Petrolatums are also moving into export channels on a better scale.

The following table shows principal exports of petroleum and petroleum products from New York reported during the last three weeks, (figures in gallons unless otherwise noted):

	Week Ended		
Gasoline—	Sept. 8	Sept. 1	Aug. 25
Bulk	2,095,463	676,200	778,352
Barrels	135,500	.....	.....
Cases	787,000	840,900	1,234,600
Kerosene—			
Bulk	1,626,108	201,600	887,190
Cases	913,660	869,150	3,424,930
Gas Oil—			
Bulk	.....	756,500	.....
Fuel Oil—			
Bulk	250,865	.....	.....
Lubricating Oil—			
Bulk	886,413	65,000	.....
Barrels	1,043,050	1,123,050	1,174,800
Cases	229,150	116,950	177,500
Lubricating Grease—			
Bbls. (Lbs.)	625,500	1,424,250	137,700
Paraffin Wax—			
Bags (Lbs.)	222,200	1,527,240	1,843,600
Bbls. (Lbs.)	.....	426,075	591,850
Petroleum Asphalt—			
Bbls. (Lbs.)	972,925	10,768,725	293,075
Petroleum Coke—			
Bags (Lbs.)	1,100,000	.....	.....

The foregoing figures include shipments of 500 bbls., 1,000 cases, or more.

Tanker Charters

The tanker chartering market is becoming noticeably less active, especially in the foreign department. Several renewals were reported of vessels already in commission.

New fixtures included the following:

Tanker W. W. Mills (Am.) 4,425 tons net, San Pedro to north of Hatteras, 75 cents, gasoline or kerosene, late September loading.

Tanker Mirita (Nor.) 3,655 tons net, Gulf to United Kingdom-Continent, 24s 6d., September loading.

Oil Receipts

Imports of oil from South America into Atlantic ports achieved a new high record during the week ended September 8 of 661,000 bbls., a daily average of 94,000 bbls. Venezuela, Colombia and Peru contributed this total. Meanwhile, imports from Mexico fell off to only 465,000 bbls., or 67,000 bbls. a day.

Receipts from California increased to a total of 869,000 bbls., or a daily average of 124,000 a day.

The following tables shows estimated daily average receipts of crude and refined oil by water at Atlantic Coast ports from the Gulf and Pacific Coasts of the United States, and imports, for the last three weeks; also monthly record for the last 12 months (figures in barrels):

	Week Ended		
	Sept. 8	Sept. 1	Aug. 25
Gulf Coast	374,000	235,000	325,000
Pacific Coast	124,000	45,000	85,000
Mexico	67,000	102,000	66,000
South America	94,000	42,000	45,000
Total	659,000	424,000	521,000

Daily Averages by Months

1926—	Gulf	Pacific	Mex.	S.Am.	Total
August	326,000	61,000	71,000	45,000	498,000
July	360,000	66,000	115,000	36,000	577,000
June	396,000	104,000	117,000	18,000	635,000
May	318,000	66,000	114,000	25,000	523,000
April	326,000	92,000	126,000	20,000	564,000
March	317,000	97,000	152,000	26,000	592,000
Feb'y.	332,000	73,000	104,000	18,000	527,000
Jan'y.	279,000	59,000	65,000	31,000	434,000
1925—					
Dec'b'r.	298,000	56,000	90,000	13,000	457,000
Nov'b'r.	259,000	36,000	80,000	12,000	387,000
Oct'b'r.	249,000	36,000	80,000	22,000	387,000
Sep'b'r.	306,000	66,000	66,000	10,000	448,000

The foregoing estimates are based on the carrying capacity of incoming oil-laden tankers.

OKLAHOMA FIELDS

(Continued from Page 50)

is a rig; digging cellar for No. 5, SE cor. SW SE; Roxana Petroleum Corp.'s No. 1 Powell, C NW NW NE, Section 35-9n-9e, a rig; Amerada Petroleum Corp.'s No. 10 Frederick, SE cor. NE NW, Section 5-7n-8e, drilling at 550 feet.

Independent Oil & Gas Co.'s No. 3 Davis, C NW SW SE, Section 26-9n-9e, sand at 3,290-3,337 feet, 136 bbls. naturally; Transcontinental Oil Co. and others' No. 2 Harjo, C NE NE NW, sand at 3,359-69 feet, 270 bbls. naturally; Amerada Petroleum Corp.'s No. 5 Frederick, C NW NW, Section 5-7n-8e, Hunton lime at 3,968-4,033 feet and Wilcox sand at 4,145-53 feet, 1,068 bbls. from both formations; Magnolia Petroleum Co.'s No. 1 Frederick, NW cor. NE SW, Section 5-7n-8e, sand at 4,184-98 feet, 400 bbls. naturally.

Caddo County

Gorton Trust's No. 1 Marchand, C SW NW, Section 2-5n-9w, drilling at 50 feet; Flora-Oklahoma Oil Co.'s No. 4 Rigney, NE cor. SW NW, Section 15-5n-9w, drilling at 200 feet.

Grady County

Magnolia Petroleum Co.'s No. 2 Smith, C SE NE, Section 11-4n-8w, drilling at 550 feet; Amerada Petroleum Corp.'s No. 1 Gatlin, SW cor. SE, Section 6-3n-5w, is a rig; Magnolia Petroleum Co.'s No. 1 Russell, NW cor. SW SW, Section 21-3n-5w, drilling at 330 feet; Garvin Drilling Co.'s No. 1 Nations, NE cor. SE, Section 34-3n-5w, drilling at 960 feet; Magnolia Petroleum Co. is rigging up cable tools for No. 3 Mitchell, SE cor. NE NW, Section 34-3n-5w; Todd & Anderson's No. 2 Nations, NE cor. SW SE, Section 34-3n-5w, drilling at 50 feet; Carter Oil Co. is rigging up No. 1 Sahm, SW cor. NW, Section 35-3n-5w.

Carter Oil Co.'s No. 1 Polson, NE cor. SE SW, Section 27-3n-5w, sand at 1,481-91 feet, 50 bbls. naturally.

Stephens County

Magnolia Petroleum Co.'s No. 1 Goza, SW cor. NE NW, Section 1-2n-5w, is a location; Carter Oil Co.'s No. 1 Graham, SW cor. NW NE, Section 2-2n-5w, drilling at 311 feet.

Carter Oil Co.'s No. 3 Isherwood, SE cor. SW SW, Section 12-2n-5w, plugged and abandoned at 1,774 feet.

Garvin County

Magnolia Petroleum Co.'s No. 12 Harris, NW cor. SW, Section 16-1n-3w, sand at 1,914-24 feet, 16 bbls. naturally; Carter Oil Co.'s No. 8 Derdyn, NE cor. SW NW, Section 17-1n-3w, completed for 60 bbls. from sand at 1,585-94 feet; The Texas Company's No. 13 Derdeyn, SW cor. SE NE, Section 17-1n-3w, sand at 1,602-08 feet, 45 bbls. naturally.

Carter County

Mid-Continent Petroleum Corp.'s No. 2 Runnels, NW cor. NE SW, Section 3-2n-3w, is a rig; Magnolia Petroleum Co.'s No. 2 Morris, SE cor. NW NW, Section 22-2n-3w, a rig; same company's No. 11 Lahman, SE cor. SW NE, Section 23-2n-3w, is drilling at 240 feet; in the same section its No. 8 Williams, NE cor. SW NE, is a rig; its No. 1 Martin, SE cor. Section 32-1n-3w, drilling at 250 feet; its No. 8 McLish, NE cor. SE SW, Section 34-1n-3w, is a location. In the same section, No. 4 Newstadt, SW cor. NW SE, is drilling at 600 feet and No. 5, NW cor. SW SE, location.

Wirt Franklin's No. 2 Pruitt, SE cor. NE NW, Section 3-2n-3w, sand at 2,130-33 feet, 150 bbls. naturally; Magnolia Petroleum Co.'s No. 12 Lahman, SW cor. SE NE, Section 23-2n-3w, drilled into No. 8 at 1,335 feet and had to be plugged; Roxana Petroleum Corp.'s No. 1 Watkins, NW cor. SE SE, Section 7-2n-2w, sand at 2,540-47 feet, 68 bbls. naturally; Magnolia Petroleum Co.'s No. 1 Cox, SE cor. NE, Section 16-2n-2w, sand at 1,157-69 feet, 77 bbls. naturally; Cameron Refining Co.'s No. 1 Anderson, NE cor. SW SE, Section 33-1n-3w, sand at 3,114-18 feet, 42 bbls.

Electric Power for Pumping Practical

Skelly Oil Co. Installation at Eldorado, Kans., Refinery in Operation for 18 Months Gives Satisfactory Results

By C. O. Willson

The Skelly Oil Co. at its Eldorado, Kans., refinery has had in operation for the past 18 months one of the most complete electrically equipped pump houses in the Mid-Continent Field. The installation has been in operation over a sufficient length of time to have passed the experimental stage leaving no doubt as to its worth, both from the standpoint of convenience and operating economy.

The use of electric power at refineries is steadily expanding. Successful installations have demonstrated that electric power properly installed is applicable to practically all pumping operations around a refinery from charging the crude oil to the stills to loading the finished products at the loading rack.

Ease of operation and low maintenance are the advantages generally stressed by plant operators in explaining their preference for motor driven pumps over steam and other types of power. Originally it was generally agreed that the electric power was more expensive than steam but recently many operators have expressed the opinion that economy can be added to convenience in electric power installations.

This latter claim naturally depends on the cost of the power whether generated at the refinery or purchased from an outside source of supply. In this connection it is noteworthy that more and more refiners, especially those operating major plants, are finding it economical as well as adding to the general efficiency of their operations to install electric power plants and furnish their own power for all phases of plant operation.

The situation at the Skelly plant previous to the building of the pump house was similar to that found at most refineries where manufacturing facilities have expanded rapidly. The Skelly refinery in the space of a few years has grown from a small skimming plant until it is now one of the major plants in the Mid-Continent Field with a skimming capacity of 15,000 bbls. daily and a 7,500-bbl. daily cracking capacity. The greater part of this expansion has taken place during the past four years.

As more storage tanks were built from time to time, connections were made to the steam driven pumps, the lines running in all directions at varying depths underground. The inevitable result of this method of handling the pumping problem was a mass of lines and connection with unsatisfactory operating conditions and heavy expense whenever it was necessary to make any changes or additions.

The installation shown in the diagram and photos was the Skelly solution to this problem. Briefly, the installation provides practically all the pumping facilities of the refinery except those directly connected with the skimming and cracking operations, gas recovery system and the treating processes. Electric power is used with the cracking unit and several other phases of the plant's operation but these units are located in other parts of the refinery.

Pump House

The main pump house is 100 by 24 feet. It will be noted that the concrete floor of the pump house is below the surface elevation. The actual depth is about 10 feet. The pump house was located at a point in the plant yard so that all the tanks are above the grade of the building. With this arrangement and the additional 10 feet below the surface elevation, there is a positive head on the pumps at all times. This greatly facilitates pumping, especially when centrifugal pumps are being used.

The pump house, including the stairways leading down to floors, is built of concrete up to the ground level. From that point to the roof, hollow tile are used. The roof is made of asbestos corrugated material, adding to the fire-proof construction features. The pump house is equally divided with a hollow tile partition which extends from the floor to the roof.

This is a fire protection wall between the room containing the electric motors and the room containing the pumping equipment. Fire protection regulations require that electric motors be isolated from pumping equipment in gas tight compartments so as to assure that fluids or gases in pumping will not be ignited

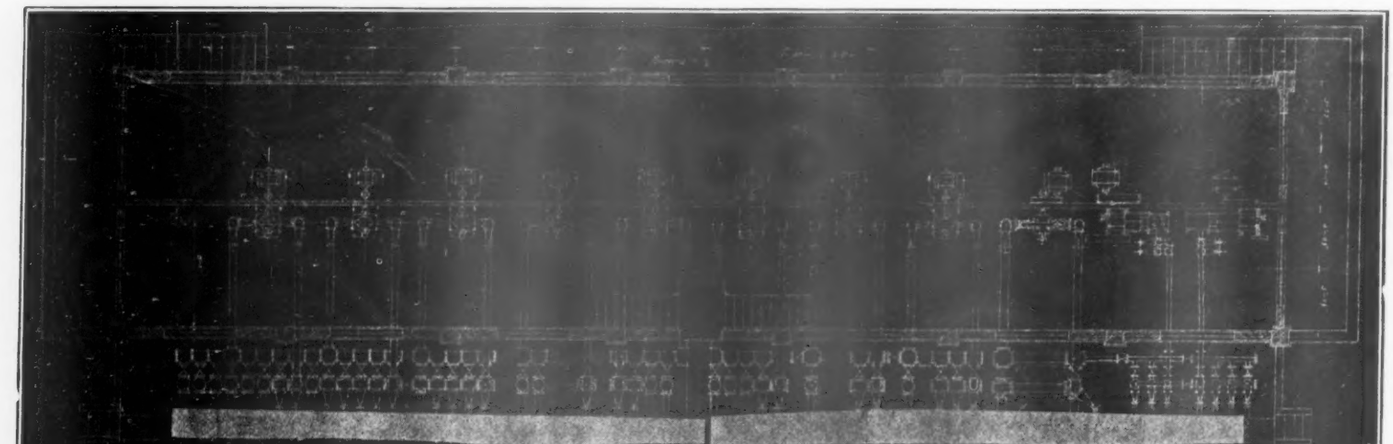


Diagram showing electric motor and pump installations with manifold and pipeline connections of main pump house at the Eldorado, Kans., refinery of the Skelly Oil Co.

by sparks from the electrical equipment. Other fire protection features include metal doors and wire glass sashes. The building is well lighted as shown by the accompanying photos.

Motor Installation

On the motor side of the pump house there are ten G. E. motors of 20 and 40 horsepower, direct-connected to pumps on the other side of the fire wall. These motors have been in consistent operation for 18 months without any maintenance expense except for a minor repair job on one motor. All the motors are generally used at least a few hours daily. The shaft connecting the motors to the pumps on the other side of the wall are packed so that they are gas tight.

For loading gasoline, kerosene and other light oils and for general transfer pumping of these products, Worthington centrifugal pumps are used. Seven of the ten pumps are of this type. With a positive head from the tanks as previously explained it has been found that

Views of motors and pumps at main pump house. Motors are direct-connected to pumps through hollow tile fire wall shown in views.

these pumps have a large capacity with very little maintenance trouble. The capacities of these pumps vary from 500 to 1,500 G. P. M.

For pumping fuel oil a plunger type pump is used. The Skelly company at the present time is delivering crude to another refinery located near El Dorado. This pumping is handled by two Gaso-Burner plunger type pumps each having a capacity of 300 gallons per minute. These pumps are silent chain driven and direct connected to two of the 40-horsepower motors.

All loading of gasoline at the Skelly plant is done at night in order to get away from the high temperatures and resulting evaporation losses incident to day time loading. The pump house is arranged so that when necessary 10 cars an hour of each product may be loaded simultaneously.

Every precaution is taken to prevent leaks in the pumping equipment and connecting lines. All flanges, tees and elbows are cast iron. To aid the operators only rising stem valves are used in the pump house. This type of valve enables the operator to determine at a glance from any part of the pump house whether a valve is closed or open.

Pit Arrangement

The floor of the pump house is so constructed that all fluids flow to a common pit. Connecting to this pit is a pump which automatically starts pumping when the oil in the pit reaches a certain level. This pump is driven by an electric motor located on the motor side of the building. The oil is pumped to plant sewer system which is above the level of the pump house floor. As soon as the pit has been emptied of the fluid the motor automatically stops. This arrangement obviously assures that there will not be any accumulation of oils in the pump house, a fact which reduces hazards and adds a great deal to the cleanliness of the building.

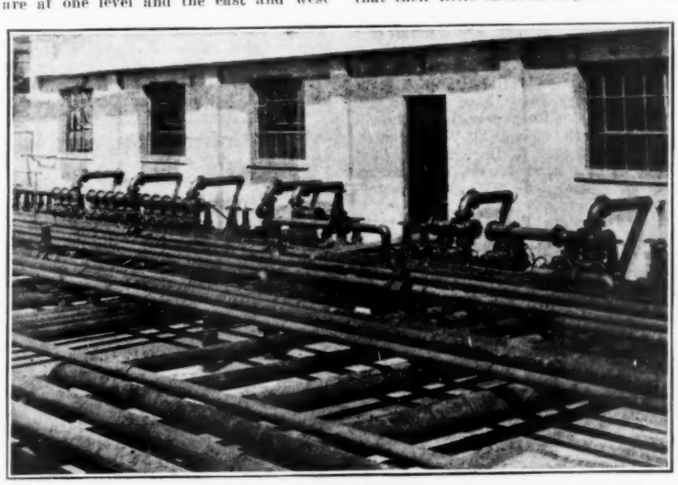
A feature which is not new but which is often overlooked in making pump connections, is the arrangement made to protect the pumps in the event the discharge line is closed. This applies to the plunger type pumps only. Each of these pumps has an automatic relief valve. In the event the discharge line is closed without the operator being notified, the relief valve at a certain pressure automatically opens a by-pass connection between the suction and discharge, thus relieving the pressure on the pump.

This arrangement is not necessary with the centrifugal pumps. The automatic relief valve and the centrifugal pumps are convenient in loading tank cars. At the Skelly plant, a bell system has been installed connecting the loading rack with the pump house. But in the event it becomes necessary to close a discharge line at the rack, this can be done without injury to the pumps or the connecting lines.

The accompanying diagram and photo shows clearly how connections are made between the storage tanks and the pump house manifolds. A line from each of the pumps discharges into manifolds adjoining the pump house. These manifolds are connected so that it is possible to discharge or take suction from any one of the 50 storage tanks which are connected to the main pump house. This arrangement of manifolds and tank connections eliminates any danger of contamination in handling the several products.

These manifolds, as shown in the photo, are located in a concrete pit. This pit is 100 by 50 feet with the bottom slightly below the surface level. The lines are arranged in such a manner that they are easily accessible for repair or to make any changes that are necessary from time to time. The north and south lines are at one level and the east and west lines at another. This arrangement facilitates operation. The lines vary in size from 4 to 10-inch.

An interesting feature of the installation is a line of tees which extends the entire length of the pump house. With this line it is possible to make any temporary pipe connections to the manifolds without disturbing the permanent lines. Steel walkways are provided over the lines in the pit in order to aid the operators.



View of manifolds outside pump house. Part of a 100 by 50-foot pit also shown. Note lines of tees on manifolds with possible temporary connections without disturbing main lines.

ROCKY MOUNTAIN AREA

(Continued from Page 110)

Oil Co. is making a test with a diamond drill and the hole is at 2,386 feet with three showings of oil and some gas. This well is expected to reach the Dakota formation within the next 200 feet and will have two sands there, the Dakota and Lakota.

Runs From the Fields

Salt Creek	44,190
Teapot	1,310
Big Muddy	3,290
Grass Creek	3,090
Elk Basin	850
Greybull	20
Rock River	2,700
Notches	270
Rex Lake	250
Lance Creek	1,210
LaBarge	120
Poison Spider	1,300
Osage	340
Hamilton Dome	1,170
Lander	300
Byron	40
Pilot Butte	40
Lost Soldier	5,140
Ferris	80
Simpson Ridge	120
Cat Creek	2,690
Lake Basin	210
Sunburst	25,000
Florence	500
Moffat	3,284
Tow Creek	735
Fort Collins	3,800
Boulder	25
Rangeley	100
Hogback	690
Rattlesnake	1,033
Artesia	3,000
Total	106,897

OVERCOMING TROPICAL OBSTACLES DESCRIBED

(Continued from Page 136)

constructed barge, much after the style of a Mississippi River snag-boat, was brought into operation. The barge was towed across stream, the pipe coupled a length at a time and the completed line dropped astern as the barge progressed. In a treacherous stream, half a mile wide and running 5 to 6 miles an hour, this was a precarious experiment calling for the highest mechanical skill, but it was accomplished without mishap.

The swamps encountered in the lower sections constituted another problem which demanded hard work and plenty of ingenuity. Wherever possible the pipe was coupled and floated into place by a pull from the other side of the swamp, but approaching Calamar where the Spaniards in ancient days had dug a canal from the Caribbean to the Magdalena so that their little caravels might avoid the dangers of its treacherous mouth in reaching the river there are swamps that called for special treatment. Pontoons, the floats being airtight steel cylinders, were used to buoy up the head end of the pipe and hold it off the bottom while the line was being floated across the swamps. The last joint of pipe was connected up on March 6, 1926, at least six months ahead of the most optimistic prediction of the prospective date of completion. Officials of the Colombia Government completed their final inspection and gave the line official authorization on May 26.

Deliver 30,000 Bbls. a Day

With the eight pumping stations in operation, the line will deliver about 30,000 bbls. of crude oil per day of 24 hours. The present potential production of the Tropical Oil Co. is about twice the capacity of the pipeline. The Andian company begins operation with a contract for the transportation of the first 50,000,000 bbls. of oil from the Infantas Field, or about five years' run. If this field and the other potential areas develop as geologists predict, the company will have to double its line before the completion of the present contract. At the terminal there have been constructed 11 80,000-bbl. tanks, affording a total storage capacity of almost 1,000,000 bbls. Cartagena Bay, 35 miles in circumference is deep water, land-locked and naturally protected from the constant swell of the Caribbean Sea.

The development of the production of the Tropical Oil Co., the operation of the pipeline of the Andian National Corp. and the despatch of the first tanker with a cargo of Colombia crude are tangible proof that the American petroleum industry is maintaining its traditions and is keeping pace with the petroleum needs of the world. Contributory to this development with its accompanying construction of new railroads and highways will be the opening up to usefulness of an area as large as many European principalities and much more bounteous in response to human effort.

Bergius and Fischer, Specialists in Oil From Coal, to Speak

PITTSBURGH, Pa., Sept. 11.—The subject of obtaining oil from coal will be a primary feature at the Carnegie Institute of Technology conference on bituminous coal to be held at Pittsburgh, November 15 to 19. The purpose of the meeting is to consider new uses for bituminous coal and to present the results of recent investigations concerned with improved methods of utilization and combustion.

A number of distinguished European scientists will take part, as well as some of the best-known American fuel technologists and engineers. The program will include the discussion of the manufacture of substitutes for gasoline from coal, complete gasification of coal, high temperature distillation, low temperature distillation, coal tar products, power, smokeless fuel, fertilizers, etc.

Among those who have accepted invitations to speak are: Dr. Friedrich Bergius, of Heidelberg, Germany, inventor of the Bergin method of production of oil from coal; Prof. Franz Fischer, director of the Institute of Coal Research, Mulheim-Ruhr, Germany; Dr. C. H. Lander, director of Fuel Research of the Department of Scientific and Industrial Research, London; Dr. R. Lessing, Consultant in Fuel Technology, London; Geoffrey M. Gill, consulting engineer and gas specialist, London. Harald Neilsen, inventor of the L. and N. process, London; General Georges Patart, of France, inventor of a process for making methyl alcohol from coal; Marcius R. Campbell, United States Geological Survey; A. C. Fieldner, United States Bureau of Mines; John M. Weiss, chemical engineer, New York, N. Y.; C. J. Ramsburg, vice president, the Koppers Co., Pittsburgh; S. W. Parr, professor of Allied Chemistry, University of Illinois; C. V. McIntire, of the Consolidated Coal Products Co., Fairmont, W. Va.

REFINING AND MARKETING

TRADE MARK EMBLEM ADOPTED BY INDIANA

The accompanying emblem is the trade-mark which has been adopted by the Board of Directors of the Standard Oil Co. of Indiana and registered with the United States patent office.

The adoption of the trade-mark is the result of several months investigation on the part of the company during which employes were asked to submit suggestions as to what the new emblem should

embody. The trade-mark adopted includes suggestions obtained from several sources.

In asking employes for suggestions, the advertising department of the company stressed three main requirements which should be included in the design. These were:

1. The design must be arranged so as to be pleasing to the eye.

2. It must be simple and of a dignity befitting the company.

3. It must symbolize the ideals which have been basic to Standard Oil Co. of Indiana policies and practices from the beginning. The Board of Directors believe that the trade-mark incorporates all these features. As explained by Norris H. Reed, advertising manager of the company.

"The general outline, a perfect circle, typifies strength, stability and dependability, while the disc at the center is symbolic of the will to render service, which is the heart and bone of the Standard Oil Co. (Indiana). The white band containing the company's name is intended to typify that complete cycle of service ever present, never ending, which the company so successfully renders. The torch which is in the foreground is a symbol which lights the way to bigger and better things. In a word the design symbolizes progress backed by service."

The new trade-mark will not interfere with the use of "Red Crown" or any other emblem used to distinguish certain products of the Standard Company. The new trade-mark is already being used with cased goods and many service stations in a short time will be utilized throughout the marketing organization.

MERCER REFINING CO.

MERCER, Pa., Sept. 13.—A voluntary petition in bankruptcy has been filed by the Mercer Refining Co. of this city. Liabilities are listed at $8,824.49 and assets at $13,041.31. The company's plant, whose principal product has been lubricating oils, was moved to Mercer from Raymilton several years ago.

WILL OPEN CHICAGO OFFICE

CHICAGO, Sept. 11.—The Crown Central Petroleum Corp., of Houston, Tex., has arranged to open an office in this city at 624 S. Michigan Ave. H. P. Bolt is to be in charge.

JOINT MEETINGS OF JOBBERS

CHICAGO, Sept. 11.—The Independent Oil Jobbers of Iowa, Nebraska, Missouri and Kansas have been asked to meet in a joint convention at Kansas City on October 28 and 29. The headquarters will be at the President Hotel. This is stated to be an important meeting and all oil jobbers are urged to attend. The date is so shortly after the meeting of the N. P. M. A. at Atlantic City that some jobbers will be unable to attend both meetings, even if they believe the results warranted the time and expense.

SKELLY OIL CO. MAILS 2,610 DIVIDEND CHECKS

TULSA, Okla., Sept. 11.—Dividend checks totalling $512,871.80 were mailed today by the Skelly Oil Co. to 2,610 stockholders of that company, located in many states of the union.

This is dividend No. 8, payable September 15 to stockholders of record at the close of business, August 16, 1926.

This is the fourth quarterly dividend paid by the company since dividends were resumed.

The dividend rate of the Skelly Oil Co. is 2 per cent quarterly. Earnings of the company for 1925 were over twice the dividend rate and for the first half of 1926 were over three times the dividend requirements for that period.

The Skelly Oil Co. for the six months ended June 30, last, reported net earnings, after all charges, of $3,106,458, or $3.18 per share for the six months' period, as against $2,328,344, or $2.79 per share in the first six months of 1925. This is the Skelly company's greatest earnings record.

With 53 wells drilling the company is now engaged upon the greatest production activity of its career. Its total daily production at this time is also greater than at any previous time since its inception. Another company record is in the total amount of proven, but undrilled acreage, now in its possession in Texas, New Mexico, Kansas, Oklahoma, Arkansas and Louisiana.

At least 20 new wells will be started by the company before the end of September.

RECENT ORGANIZATIONS

CHICAGO, Sept. 11.—There have been several recent organizations of distributing companies in this vicinity.

The Wana Oil Co. has been organized at Huntington, Ind., by C. P. Parker, formerly with the Hawkeye Oil Co., and Sol Bronsteen. It will handle a full line and have considerable storage.

The Metropolitan Petroleum Co. has been incorporated for $20,000 to lease and operate service stations, and the sale and repair of auto accessories. The office for the present is at 20 West Jackson Blvd., Chicago. I. B. Zimmerman is given as the head of the organization which is represented by Wisch & Resnick, attorneys.

The Interstate Petroleum Corp., of Huntington, Ind., distributors of Shell products, has been taken over by the Roxana Petroleum Corp. It has 12 bulk and 23 service stations.

F. P. Kendall is president of the Kendall Oil Co., a $100,000 organization formed to handle Marland products at Memphis, Tenn. It will operate a bulk and five service stations.

BUYS FILLING STATION

CHICAGO, Sept. 11.—The Osborne Oil Co., of Rockford, Ill., has bought the P. D. Foster Co., of Beloit, Wis. The Foster Co. operates stations at Beloit, Janesville, Clinton and Rockton, Wis.

NEW SHIPMENT RECORD BY PAN AMERICAN CO.

LOS ANGELES, Calif., Sept. 13.—Shipments of the Pan-American Petroleum Co. from its San Pedro terminal here totaled more than 1,600,000 bbls., according to an official report by E. L. Doheny, who heads the Pan-Western Petroleum Corp., of which the Pan-American Petroleum is a part. This broke all records for any month's shipments.

About a quarter of the total shipments was gasoline. The cargoes were moved in 18 vessels destined through the Panama Canal to Atlantic ports of the United States and South America. A large quantity of bunker oil was delivered in barges. The Los Angeles port charges paid by the Pan-American Petroleum Co. amounted to more than $8,000.

GENERAL PETROLEUM EXPANDING STATIONS

LOS ANGELES, Calif., Sept. 13.—A general expansion program providing for the construction of at least 100 service stations and enlargement of facilities at its Watson tank farm and refinery has been announced by the General Petroleum Corp. The new stations will involve an expenditure of $5,000,000. The chain will extend from San Diego in southern California to Vancouver, British Columbia.

The company recently completed its first retail station in San Francisco and sites already have been obtained in Los Angeles, San Diego, Bakersfield, Pomona, Colton, Banning, Santa Monica and Santa Barbara both for retail stations and distributing plants.

COSDEN HAS BARRELING PLANT

CHICAGO, Sept. 11.—The Cosden Sales Corp. has made arrangements for the establishing of a barreling plant for its lubs in this city. Space with storage for 140,000 gallons has been secured and stocks of its regular oils will be carried. It will also make special oils for any purpose, and compound from customers' formulas. Shipments will be made in one-time shippers or in customers' containers as desired.

BUILDING PUMPING STATION

CHICAGO, Sept. 11.—The Ozark Pipe Line Co., which is building the new pipe line from Wood River to the new Roxana refinery at East Chicago, has begun the erection of a pumping station at Sibley, Ill., stated to be the highest point on the right-of-way. The power will be supplied by three 200-horsepower Diesel engines.

WILL ADVERTISE OIL BURNERS

CHICAGO, Sept. 11.—At the weekly luncheon of the Chicago Oil Men's club, plans were discussed for the joint campaign of the oil men and the local oil burner manufacturers to push the sale of oil burners. The plan contemplates the immediate expenditure of a sum which may be $16,000 in local bill board advertising.

ROAD FROM COAL TO OIL

Conversion of its locomotives from coal to oil on the Williston, N. Dak., to Seattle, Wash., line has almost been completed by the Great Northern Railroad, according to J. H. O'Neil, general manager. The railroad will obtain its fuel from Montana refineries and also will spread bottom oils over its entire roadbed to eliminate dust.

MARKETING COURSE, NEW YORK UNIVERSITY

NEW YORK, Sept. 13.—Of interest to those connected with the marketing of petroleum products is the announcement that the New York University is opening a complete course in marketing and utilization of fuel oils, gasoline and other oil products. The course will consist of regular lectures supplemented by round table discussion.

In the study, particular attention will be paid to problems of the domestic and industrial oil burner industries arising from the increased use of lower grades of oil in producing cracked gasoline.

The course will be under the immediate direction of Dr. Ernest R. Lilley, assistant professor of geology, who has made an exhaustive study of production and marketing problems and is the author of numerous articles on the subject. It will continue throughout the academic year beginning September 27. Classes will meet from 5:15 to 7 o'clock on Monday evenings.

MINNEAPOLIS COMPANY BUILDING WAREHOUSE

MINNEAPOLIS, Minn., Sept. 13.—Midwest Oil Co., Inc., a Minnesota corporation, has purchased a large site at Minneapolis and is starting construction on an office building and a warehouse for the distribution of petroleum products. The improvements will represent an investment of $200,000. Storage tanks with a capacity of 1,000,000 gallons and a complete laboratory for testing oils will be provided.

The Midwest Oil Co. was organized 8 years ago and now serves 2,000 dealers in gasoline and oil throughout the Middle Western States. Officers are: E. M. Dyar, president; L. P. Westrum, vice president, and L. A. Potter, secretary.

PENNSYLVANIA MARKET STRONG DURING WEEK

OIL CITY, Pa., Sept. 11.—Gasoline and naphtha were strong during the week in the Pennsylvania refined area and the prices for these products easily held their own. Fuel oil was stronger and in good demand. Neutrals continued strong without changes in prices. Wax was slightly weaker than usual with the demand easing off a little. Kerosene prices continued to hold their own and the demand was fair. Cylinder stocks were much weaker and the quotations for the various grades were reduced by all the refineries in the district. Bright stocks were very strong, in excellent demand and scarce.

Wet weather held down the consumption of gasoline and motor oils during the week. Travel on Labor Day was heavy but not anywhere near so great as it would have been if the weather had been more favorable.

REDUCTION IN OIL RATE

GREAT FALLS, Mont., Sept. 13.—The reduction in rates of fuel oil from Montana to the Twin Cities from 70 to 37½ cents per 100 pounds is proving a great benefit to refineries of this state. The rate was effective September 3.

DENIES GREAT FALLS SALE

GREAT FALLS, Mont., Sept. 13.—Reports that the Sunburst Refining Co. has disposed of its plant at Great Falls have been denied by L. C. Stevenson, president of the company. The plant was built in 1922 at a cost of $500,000.

JENKINS CRACKING PROCESS

PRODUCES QUALITY GASOLINE

Facts from performance

A FIRST IMPRESSION

An interested refiner inspecting a Jenkins unit on approaching the plant asked why it was not running.

It *was* running at full capacity, quietly, with no escaping fumes, producing only gasoline and fuel oil, and doing this over 90% of the time.

GRAVER Corporation Founded 1857

EAST CHICAGO, INDIANA

NEW YORK Grand Cent. Term. · CHICAGO Steger Building · TULSA Atlas Life Bldg. · HOUSTON West Building

Brief Items for Plant Operators

Endpoint Does Not Affect the Antiknock Value of Gasoline

Endpoint has little or no effect on the antiknock properties of gasolines, according to Gustav Egloff and Jacque C. Morrell of the Universal Oil Products Co., who presented a paper before the Petroleum Division of the Universal Oil Products Co. at the annual meeting of the society last week in Philadelphia, Pa.

Doctors Egloff and Morrell, in another paper, also reported that in treating a California cracked gasoline with sulphuric acid for color and odor and the antiknock value of the treated was lowered in value.

A series of experiments were carried out in an automotive engine to check up on the effect of the endpoint of gasolines upon their detonating properties in an automotive engine. Three commercial endpoints of gasolines were selected for comparative tests, being approximately 390, 410 and 430 degrees Fahrenheit. Comparative tests were made at these three temperatures on Cushing straightrun and cracked gasolines derived from the same crude, and also on California straightrun and cracked gasolines.

On the Cushing straightrun gasoline no differences were found on the non-detonating properties of the three gasolines having endpoints of 389, 412 and 427 degrees Fahrenheit. Likewise, practically no difference was found in the non-detonating properties of Cushing cracked gasoline when tests were made on endpoint gasolines of 393, 411 and 430 degrees Fahrenheit.

	Cushing Straight-Run Gasoline			Cushing Cracked Gasoline		
End point	389°F	412°F	427°F	393°F	411°F	430°F
Knock Point	Spark Advance			Spark Advance		
A	5.5	6.0	6.0	8.5	10.5	10.0
B	9.0	9.5	9.0	11.5	13.0	13.5
C	13.5	15.0	15.0	18.0	17.0	17.5
D	19.0	19.0	19.0	23.0	22.0	22.0
Benzol Equiv. Pct.	0.0	0.0	0.0	10.0	8.0	8.0

The California straightrun gasolines having endpoints of 388, 408 and 431 degrees Fahrenheit, showed a maximum difference between the three gasolines of 4 per cent benzol equivalent. Likewise, California cracked gasolines with endpoints of 386, 406 and 429 degrees Fahrenheit, showed a 4 per cent benzol equivalent difference.

	California Straightrun Gasoline			California Cracked Gasoline		
End-point	388°F	408°F	431°F	386°F	406°F	429°F
Knock Point	Spark Advance			Spark Advance		
A	13.5	13.5	12.5	18.0	15.0	14.5
B	18.0	17.5	16.0	21.5	18.5	17.5
C	24.0	22.0	21.0	26.0	24.5	23.5
D	31.0	29.0	26.0	28.0	25.0	24.0
Benzol Equiv. Pct.	24.0	21.0	20.0	28.0	25.0	24.0

Effect of Acid Treatment

A number of tests were conduted to determine the effect of treating cracked gasoline for color and odor, and its effect upon the detonating properties of the untreated and treated cracked gasoline. In treating a California cracked product with sulphuric and acid for color and odor, it was found that the treated cracked gasoline had a 3 per cent lower benzol equivalent than the untreated cracked gasoline.

California Cracked Gasoline

Knock Point	Treated Spark Advance	Untreated Spark Advance
A	17.0	23.0
B	25.0	27.0
C	32.0	34.0
D	42.0	45.0
Benzol Equiv. Pct.	35.0	38.0

The California cracked gasoline was not acid-treated to the extent of bringing the sulphur content of the gasoline down to 0.15 per cent, but was just treated sufficiently to improve the odor and color to marketable conditions.

BARTELS-MAGUIRE ADD TO PLANT

CHICAGO, Sept. 11.—Bartels-Maguire, who are now operating one Jenkins Process unit at their East Chicago plant, are completing the installation of a second unit and will have it in operation shortly. The output will be about 1,000 bbls. it is stated, which they plan to use for their own distribution.

NEW GASOLINE PLANTS

LOS ANGELES, Calif., Sept. 13.—The Pacific Gasoline Co., the Pacific National Gasoline Co. and the Wilshire Oil Co. have been granted permits to build natural gasoline plants at Huntington Beach. The Pacific Gasoline Co. will install plant costing $110,000. The other two plants will cost only $15,000 each.

Recent Patents

1,596,588. Process for Treating Water in Oil Emulsions. Melvin De Groote, St. Louis, Mo., assignor to William S. Barnickel & Co., Webster Grooves, Mo., a corporation of Missouri. Filed December 23, 1924. Serial No. 757,738. Four claims. (Cl 196—4).

3. A process for treating petroleum emulsions, characterized by subjecting the emulsion to the action of a water soluble soap obtained from a shale oil sludge.

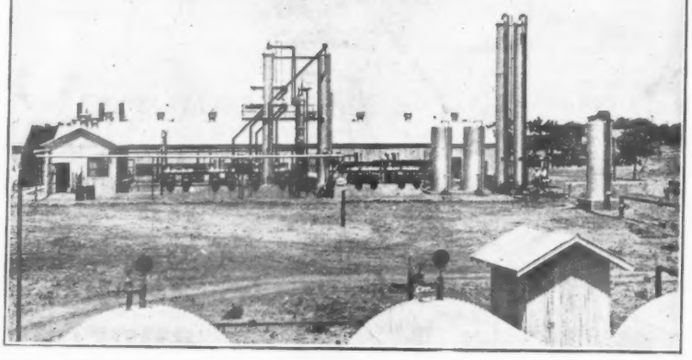
4. A process for treating petroleum emulsions, characterized by subjecting the emulsion to the action of a water soluble soap obtained from a sulphonated shale oil sludge.

BROWN COUNTY PLANT OF HUMBLE COMPANY ELECTRICALLY OPERATED

FORT WORTH, Tex., Sept. 11.—For beauty of design as well as efficiency in operation, the Humble Oil & Refining Co.'s natural gasoline plant in the Cross Cut Field of Brown County is an excellent model. It is electrically operated and has eight low-stage, type S, 80-horsepower Clark compressors and one 80-horsepower high-stage tail gas compressor. Three other high-stage compressors to handle residue gas are to be installed immediately, also. An 80-horsepower Bruce Macbeth furnishes the auxiliary power.

The rated capacity of this plant is about 6,000,000 feet of gas daily, or about 7,200 gallons of gasoline a day, but due to the richness of the gas in this district this plant is averaging from 14,000 to 15,000 gallons daily. The gas tests all the way from one to five gallons per 1,000 feet. The plant has been in operation since May of this year. R. W. Potter is superintendent.

One of the interesting features of this plant is the symmetrical arrangement of all pipes and fittings. Nothing is out of line and wherever several fittings or items of equipment occur in a row, a straight edge could be laid along them and they wouldn't vary enough to be detected by the eye.



Brown County, Texas, natural gasoline plant of the Humble Oil & Refining Co.

AMONG THE TECHNICAL MEN

C. A. Soars, manager of the refining department of the Louisiana Oil & Refining Corp., Shreveport, La., is an engineer of wide experience. Although practically all of his experience in refineries has been gained in eastern refineries his duties brought him to the Mid-Continent frequently.

C. A. Soars

Mr. Soars was born in Philadelphia and graduated from Bucknell University in 1917, where he specialized in chemical engineering. Following his graduation, he enlisted in the navy and during the World War served with the destroyer fleets in transport duties. When discharged he held a lieutenant's commission.

At the close of the war he went to the Standard Oil Co. of New Jersey's Bayonne refinery and was attached to the development department. Until a few months ago his duties brought him in contact with every phase of the refining industry in eastern refineries. A great amount of his time has been spent in the construction and operation departments of the Standard refineries.

A few months ago he was chosen to head the Louisiana company's refining department and went to Shreveport, March 1. His first big task was carrying out a $1,000,000 improvement program at the Louisiana company's Bossier City, La., plant. The project was completed in record time, having been finished about the middle of July and doubling the capacity of the 10,000-barrel plant.

PARAGON REFINING CO. ENLARGEMENT PROGRAM

The Paragon Refining Co. has started work on a general improvement and enlargement program at its Toledo, Ohio, refinery. The most important improvement is to be the installation of two 1,000-bbl. Dubbs cracking units. These units are to be the latest Dubbs type with 90 tube stills and 10 by 40 reaction chambers.

The company will also install a gas recovery and absorption plant. The continuous treating unit with a capacity of 2,500 bbls. daily will soon be in operation. Bubble towers are also being installed. With the improvements the company expects to approximately double its gasoline output. The engineering work is being done by the Widdell Engineering Co. of Cleveland, Ohio.

DEEPWATER INSTALLS TWO CRACKING UNITS

The Deepwater Oil Refineries, Inc., has started the installation of two Holmes-Manley cracking units at its refinery near Houston. The company's refinery activities in the past have been confined to the manufacturer of lubricants. With the cracking facilities, the company will also have a substantial output of gasoline and other light end products.

The Deepwater company is the second in the Texas Gulf Coast area to install the Holmes-Manley cracking units. The Crown Central Petroleum Co. is also installing the Holmes-Manley equipment, owned by The Texas Company. The charging stock for the Deepwater and Crown Central units will be obtained from cuts secured in the operation of the lub plants and formerly sold as fuel or gas oil.

Standard Test for Anti Knock Fuels

Director of Ethyl Gasoline Corp. Announces Discovery of New Octane With Which to Measure Value of Motor Fuels

By L. M. Fanning

New York Bureau, The Oil and Gas Journal, Room 543, 30 Church St., New York City

PHILADELPHIA, Pa., Sept. 11.—About every phase of the motor fuel problem including refining methods, antiknock fuels, proposed antiknock standard gasoline test, the automobile saturation point, idling automobiles and carbon monoxide fumes, gas from low carbonization of coal and the future security of the automobilist lying in the energy power of the atom and the electron, were discussed at the Petroleum Section and other sections of the American Chemical Society during the society's annual meeting here September 6 to 10.

R. R. Mathews, of the Roxana Petroleum Corp., St. Louis, was re-elected chairman of the Petroleum Division. G. A. Burrell of Pittsburgh, Pa., was re-elected secretary.

One of the most interesting contributions was the announcement by Dr. Graham Edgar of New York, director of research of the Ethyl Gasoline Corp., of the discovery of a new octane, and the building up with this chemical compound of a standard antiknock, by which antiknock fuels can be tested.

The new octane, it was said, is very closely related to gasoline, but its antiknock properties are greater than any fuel now known. Not capable of being commercialized because of its cost, its value lies in its character as a constituent of a standard fuel to which all others may be compared.

By mixing this octane, which will not knock, with normal heptane, one of the constituents of ordinary gasoline which knocks violently, Doctor Edgar, who was formerly head of the department of chemistry of the University of Virgina, produces mixtures which can duplicate the knocking character of any motor fuel.

In this way, it was pointed out, it is possible to state the antiknock of any fuel in terms of the proportion of these two constituents in an equivalent mixture. Doctor Edgar's octane was developed at the corporation's laboratory at Yonkers, N. Y.

Octane and heptane in a mixed fuel, it was found, will evaporate at the same rate so that the composition of the gas mixture in the cylinder can be perfectly controlled. The two substances have boiling points so nearly identical that variation of the composition of the explosive mixture because of unequal vaporization is not to be feared.

Standard Antiknock

By using this standard fuel, Doctor Edgar said, it should be possible to rate all gasolines in terms of varying proportions of the two standard hydrocarbons and to establish definite specifications for gasolines for different purposes corresponding to any desired knock characteristics which it might be desired to maintain.

"Thus," he added, "the United States Government motor gasoline might be required to maintain a standard knock tendency at least equivalent to a certain mixture of the heptane and octane; fuels for high compression engines, airplane engines, etc., would be required to maintain a different standard as might be desired, and the specifications would be capable of test by any laboratory more or less independently of arbitrary methods of measurement."

Prof. James F. Norris in his address as president of the society told of the existence of a droplet of colorless oil in the laboratory of Dr. Samuel C. Lind, chief chemist of the United States Bureau of Mines, Washington, which meant "a supply of combustible liquid to run our automobiles when petroleum is exhausted," and the dawning of a new area in chemistry.

"When I saw not long ago in the laboratory of Dr. S. C. Lind a tiny drop of colorless oil that had been formed from methane—the chief constituent of natural gas—as the result of the action of this form of energy upon it, I felt a new era in chemistry had dawned.

"That droplet meant a supply of combustible liquid to run our automobiles when petroleum is exhausted. We can make methane from carbon and hydrogen when the supply of natural gas fails us. The sun will always be able to convert carbon dioxide into a form from which we can get back carbon.

"The pessimistic critic will declare this is all impossible. He will say that radium was used to get the kind of energy to bring about the transformation and that there is not enough radium in the world if we could afford to pay the high price for energy needed.

"But radium is not necessary. The work of Coolidge shows that we can get this kind of energy from the X-ray tube. But again the rejoinder is that this kind of energy is too expensive to use. Such a critic limits the achievements of the future to the application of known knowledge and cannot see that the past has proven that the knowledge furnished the means for advance. When electricity from a primary battery was first converted into light, who would have conceived of its being ever cheap enough to be used to draw heavy freight trains over mountains? The study of the behavior of matter under the action of energy with a high intensity factor will lead to a new chemistry."

Fieldner Report

Dr. A. C. Fieldner, head of the Pittsburgh Experimental Station of the United States Bureau of Mines, said in his report on trends observed in the automotive industry and with special reference to the future use of fuels from low temperature carbonization of coal, that the indications are that petroleum will continue to furnish the great bulk of automotive fuel during the next decade.

The increase of motor vehicles in the United States from 100,000 to more than 20,000,000 in 20 years, Doctor Fieldner said, makes an adequate future motor supply a national necessity. The total number of automotive engines in this country in 1930 will reach 31,000,000, double the number in 1925, according to estimates presented by Doctor Fieldner. In 1950, the 45,000,000 figure will be reached—another 50 per cent increase, but in a period of 20 years.

"The saturation ratio for passenger cars is assumed as one car for four persons," he added. "This figure will be reached in 1932. After this date any further increase will be due to increase in population. Production thus far has more than kept pace with growing demand and recent improvements in cracking have made it possible to crack any type of crude oil into gasoline, coke and gas.

"Present trends in the automotive and petroleum industry in our opinion are in harmony with predictions that petroleum will continue to furnish the great bulk of automotive fuel during the next decade."

Idling automobile motors are costing American motorists $80,000,000 annually and also are creating dangerous health conditions in large cities, according to Prof. Alexander Silverman, head of the department of chemistry of the University of Pittsburgh. The menace from carbon monoxide exhaust fumes is assuming serious proportions in the congested traffic centers, he said. This, aside from its extravagance, should condemn the practice of allowing standing motors to run.

In cities, Professor Silverman said, the pollution of the air by automobile exhausts was reaching the saturation point. He predicted the passage in the near future of restrictions in the large cities against the carbon monoxide evil.

No less an authority than Irene du Pont, vice chairman of the board and chairman of the finance committee of E. I. du Pont de Nemours & Co., reviewing the notable achievements of chemical compounds in the commercial world, spoke of the discovery of the ethyl lead compounded antiknock gasoline. "It is well known," he said, "that the thermal efficiency of an internal combustion engine increases quite rapidly with the degree of initial compression put upon the mixture of fuel and air before its ignition, and that, unfortunately, when a pressure is reached which is quite definite for any particular fuel, the nature of the explosion in the engine suddenly changes, producing what is known as a "knock," that this knock is occasioned by a nearly instantaneous and very high pressure explosion in which a large proportion of the energy is given out as radiant energy to be absorbed by the walls of the cylinder and, therefore, not available for mechanical work on the crankshaft. The critical pressure which induces a knock is far below that which could be easily obtainable mechanically.

"Thomas Midgley, of the Dayton Engineering Laboratories, in his investigation of the cause of 'knocking,' discovered that adding small amounts of certain compounds to the fuel materially changed the pressure at which knocking was produced. He finally found tetraethyl lead whose properties in this regard are quite astonishing.

"Amounts as small as one-twentieth of 1 per cent of the fuel are ordinarily sufficient to permit an increase of 50 per cent in the initial compression, with a corresponding increase in the efficiency of the motor using it. It is now certain that the mileage of automobiles per gallon of gas can be increased 50 per cent by its use. Consequently one-third of all gasoline used can be saved by the use of this compound. If it had been universally applied in the year 1925 this would have resulted in a saving of some 3,000,000,000 gallons of gasoline. One may reasonably expect that this saving actually will be obtained within a few years. It will, of course, require changes in automobile design."

Most of the papers presented before the Petroleum Section of the society were abstracted in last week's issue of The Oil and Gas Journal.

ABSTRACTS OF PAPERS

Abstracts of papers presented before the Petroleum Division of the American Chemical Society at its annual meeting held in Philadelphia last week were published in the September 9 issue of The Oil and Gas Journal starting on page 31. A partial report of the proceedings which ended Friday was also given in the September 9 issue.

RECEIPTS OF CALIFORNIA OILS AND IMPORTS OF PETROLEUM

Receipts of California crude and refined oils at Atlantic and Gulf Coast ports for the month of August totaled 2,651,000 bbls., a daily average of 85,516 bbls., compared with 2,332,000 bbls., a daily average of 75,226 bbls. for the month of July.

Receipts at Atlantic and Gulf Coast ports for the week ended September 4 totaled 537,000 bbls., a daily average of 76,714 bbls., against 618,000 bbls., a daily average of 88,286 bbls. for the week ended August 28.

	Total		Week Ended	
At Atlantic Coast Ports—	August	July	Sept. 4	August 28
Baltimore	460,000	*638,000	70,000	70,000
Boston	322,000	90,000	.....	.....
New York	771,000	765,000	303,000	166,000
Philadelphia	550,000	*454,000	77,000	159,000
Others	548,000	*365,000	87,000	223,000
Total	2,651,000	2,312,000	537,000	618,000
Daily average	85,516	74,581	76,714	88,286
At Gulf Coast Ports—				
Tampa	.....	20,000	.....	.....
Daily average	.....	645	.....	.....
Total Atlantic and Gulf Coast ports	2,651,000	2,332,000	537,000	618,000
Daily average	85,516	75,226	76,714	88,286
Distribution of total California oil receipts is as follows:				
Crude	1,077,000	1,222,000	163,000	234,000
Gasoline	747,000	516,000	147,000	70,000
Gas oil	422,000	450,000	156,000	244,000
Fuel oil	347,000	144,000	71,000	70,000
Lubricating	58,000	.....	.....	.....
Total	2,651,000	2,332,000	537,000	618,000

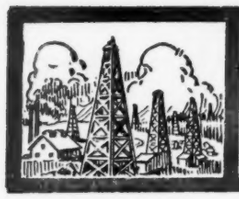
*Revised.

According to figures collected by the American Petroleum Institute, imports of crude and refined oils at the principal ports for the month of August totaled 6,676,000 bbls., a daily average of 215,355 bbls., compared with 6,888,000 bbls., a daily average of 222,194 bbls. for the month of July.

Imports at the principal United States ports for the week ended September 4 totaled 1,402,000 bbls., a daily average of 200,286 bbls., compared with 1,227,000 bbls., a daily average of 175,286 bbls. for the week ended August 28.

	Total		Week Ended	
At Atlantic Coast Ports—	August	July	Sept. 4	August 28
Baltimore	679,000	*752,000	165,000	162,000
Boston	142,000	241,000	42,000	60,000
New York	2,476,000	*3,031,000	623,000	437,000
Philadelphia	165,000	*208,000	.....	70,000
Others	581,000	812,000	224,000	95,000
Total	4,043,000	5,044,000	1,054,000	824,000
Daily average	130,419	162,710	150,571	117,715
At Gulf Coast Ports—				
Galveston district	605,000	410,000	74,000	127,000
New Orleans and Baton Rouge	1,778,000	1,233,000	274,000	226,000
Port Arthur and Sabine district	160,000	63,000	.....	50,000
Tampa	90,000	138,000	.....	.....
Total	2,633,000	1,844,000	348,000	403,000
Daily average	84,936	59,484	49,715	57,571
At All United States Ports—				
Total	6,676,000	6,888,000	1,402,000	1,227,000
Daily average	215,355	222,194	200,286	175,286

*Revised.



REFINERY AND CRUDE PRICES

Quotations on Principal Refined Products and Crude Petroleum Markets in All the American Oil Fields

GASOLINE AND NAPHTHA

	Sept. 14		Sept. 7		Aug. 31	
OKLAHOMA (Group 3)—						
50-52 450 end point (Naphtha)	.10⅝	.10¾	.10¾	.10⅞	.10½	.10¾
56-58 450 end point	.10½		.10¾	.10⅞	.10½	.10⅝
58-60 450 end point	.10½	.10⅝	.10⅞	.11⅛	.10⅝	.10⅞
58 60 437 end point (U. S. Motor)	.10⅝	.11	.11	.11⅜	.10¾	.11¼
60 62 400 end point	.11¼	.11⅜	.11⅝	.11¾	.11⅜	.11½
64-66 375 end point	.11¾	.12	.11⅞	.12	.11⅝	.11¾
68-70 360 end point	.12	.12⅛	.12	.12⅛	.12	.12⅛
KANSAS—						
58-60 437 end point (U. S. Motor)	.11⅛	.11⅜	.11⅜	.11½	.11¼	.11½
NORTH TEXAS—						
48-50 450 end point (Naphtha)	.10⅝	.10¾	.10⅝	.10¾	.10½	
50-52 450 end point (Naphtha)	.10⅝	.10¾	.10¾		.10½	.10¾
56-58 450 end point	.10¾	.10⅝	.10¾	.10⅞	.10⅜	.10½
58-60 437 end point (U. S. Motor)	.10½	.10⅞	.11	.11¼	.10¾	.11
60-62 400 end point	.11¼		.11½	.11⅝	.11¼	.11⅜
64 66 390 end point	.11⅜	.11⅝	.11⅝	.11⅞	.11⅜	.11½
64 66 375 end point	.11⅝	.11⅞	.11¾	.11⅞	.11½	.11⅝
68-70 360 end point	.12	.12⅛	.12	.12⅛	.12	.12⅛
NORTH LOUISIANA—						
58-60 437 end point (U. S. Motor)	.11	.11¼	.11⅛	.11¼	.10¾	.11
ARKANSAS—						
58-60 437 end point (U. S. Motor)	.11	.11¼	.11¼	.11½	.10¾	.11
ROCKY MOUNTAIN STATES—						
*58-60 437 end point (U. S. Motor)	.13⅜	.14	.14	.14½	.13⅞	.14
PENNSYLVANIA—						
52 Naphtha	*.12½	.12¾	.12¼	.12½	.12¼	.12½
54 Naphtha	.12¾	.13	.12½	.12⅝	.12½	.12⅝
56 Gasoline	.13	.13¼	.12⅝	.12⅞	.12⅝	.12⅞
58 Gasoline	.13¼	.13½	.12⅞	.13	.12⅞	.13
60 Gasoline	.13½	.13¾	.13½	.13¾	.13½	.13¾
62 Gasoline	.14½	.14¾	.14¼	.14½	.14¼	.14½
64 Gasoline	.14¾	.15	.14½	.14¾	.14½	.14¾
66 Gasoline	.15¾	.16	.15½	.15¾	.15½	.15¾
68-70 Gasoline	.17¾	.18	.17½	.17¾	.17½	.17¾
CALIFORNIA—						
54-58 437 end point (U. S. Motor) domestic	.12	.12½	.12	.12½	.12	.12½
CHICAGO DISTRICT (Based on Group 3)—						
50-52 450 end point (Naphtha)	.10¾		.10¾	.11	.10½	.11
56 58 450 end point	.10½	.10⅝	.10¾	.11	.10½	.10¾
58 60 437 end point (U. S. Motor)	.11		.11¼	.11⅜	.11	.11¼
60-62 400 end point	.11½	.11⅝	.11½	.11¾	.11½	.11¾
64-66 375 end point	.11⅞	.12	.11¾	.12	.11¾	.12
68-70 360 end point	.12¼		.12¼		.12¼	.12½

*Colorado points.

NATURAL GASOLINE

	Sept. 14		Sept. 7		Aug. 31	
OKLAHOMA (Group 3)—						
Grade AA-80-87.9, 375 e.p., rec. 90%	.10¼	.10⅜	.10¼		.10	.10⅛
Grade A, 72-79.9, 375 e.p., rec. 90%	.10¼	.10⅜	.10¼		.10	.10⅛
Grade BB, 84 92, 375 e.p., rec. 85%	.10⅛	.10¼	.10	.10⅛	.09⅞	.10
Grade B, 76 83.9, 375 e.p., rec. 85%	.10⅛	.10¼	.10	.10⅛	.10	
Grade C, 80-90, 375 e.p., rec. 78%	.09⅞	.10	.09¾	.10	.09¾	.10
NORTH TEXAS—						
Grade AA, 80-87.9, 375 e.p., rec. 90%	.10¼	.10⅜	.10⅛	.10⅜	.10	
Grade A, 72-79.9, 375 e.p., rec. 90%	.10¼	.10⅜	.10⅛	.10⅜	.10	
Grade BB, 84-92, 375 e.p., rec. 85%	.10¼	.10¼	.10	.10⅛	.09⅞	.10
Grade B, 76-83.9, 375 e.p., rec. 85%	.10⅛	.10¼	.10	.10⅛	.10	
Grade C, 80-90, 375 e.p., rec. 78%	.10		.09¾	.10	.09¾	.10
NORTH LOUISIANA—						
Grade A, 72-79.9, 375 e.p., rec. 90%	.10⅞	.11	.10⅝	.10¾	.10⅝	.10¾
Grade B, 76-83.9, 375 e.p., rec. 85%	.10⅝	.10⅞	.10½	.10⅝	.10½	.10⅝
Grade G, 80-90, 375 e.p., rec. 78%	.10½	.10⅞	.10⅜	.10½	.10⅜	.10½
CALIFORNIA—						
75-85, 375-390 end point	.15½	.16	.15½	.16	.15½	.16
CHICAGO DISTRICT (Based on Group 3)—						
Grade AA, 80 87.9, 375 e.p., rec. 90%	.10¼	.10¾	.10	.10¼	.10	.10¼
Grade A, 72 79.9, 375 e.p., rec. 90%	.10¼	.10¾	.10	.10¼	.10	.10¼
Grade BB, 84-92, 375 e.p., rec. 85%	.10	.10¼	.09¾	.10	.09¾	.10
Grade B, 76-83.9, 375 e.p., rec. 85%	.10	.10¼	.09¾	.10	.09⅞	.10
Grade C, 80-90, 375 e.p., rec. 78%	.09¾	.10	.09¾		.09¾	.10

MOTOR NATURAL GASOLINE

	Sept. 14		Sept. 7		Aug. 31	
OKLAHOMA (Group 3)—						
60-62 450 end point	.10⅜	.10½	.10½	.10⅜	.10⅜	.10½
64-66 437 end point	.10⅝	.10¾	.10¾	.11	.10½	.10⅝
NORTH TEXAS—						
64-66 437 end point	.10½	.10¾	.10¾		.10⅜	.10½
PENNSYLVANIA—						
*60-62	.13	.13¼	.13	.13¼	.13	.13¼
*64-66	.13¼	.13½	.13¼	.13½	.13¼	.13½
*66 68	.13½	.13¾	.13½	.13¾	.13½	.13¾
*68-70	.13½	.13¾	.13½	.13¾	.13½	.13¾
CHICAGO DISTRICT (Based on Group 3)—						
60-62 450 end point	.10¼		.10½	.10¾	.10½	
64-66 437 end point	.10½		.10¾		.10¾	.11

*At Sistersville, W. Va.

BURNING OIL

	Sept. 14		Sept. 7		Aug. 31	
KANSAS—						
41-43 water white Kerosene	.09⅝	.09⅝	.09⅝	.09¾	.09½	.09¾
OKLAHOMA (Group 3)—						
41-43 water white Kerosene	.09¼	.09½	.09¼	.09⅝	.09¼	.09⅝
42-44 water white Kerosene	.09⅞	.10	.09⅞	.10⅛	.09⅞	.10
NORTH LOUISIANA—						
41-43 prime white Kerosene	.09½	.09¾	.09½	.10	.09½	.10
ROCKY MOUNTAIN STATES—						
*40-41 water white Kerosene	.12¼	.12½	.12½	.12¾	.12½	.12¾
NORTH TEXAS—						
41-43 water white Kerosene	.09⅛	.09¼	.09⅜	.09½	.09½	
ARKANSAS—						
41 43 water white Kerosene	.09½		.09½		.09½	.10
PENNSYLVANIA—						
43 Kerosene prime white	.09¾	.10	.09¾	.10	.09¾	.10
45 Kerosene water white	.10¼	.10½	.10¼	.10½	.10½	.10½
46 Kerosene water white	.11	.11¼	.11	.11¼	.10⅝	.11
47 Kerosene water white	.11¼	.11½	.11¼	.11½	.11¼	.11½
34 Neutral	.07½	.07¾	.07½	.07¾	.07½	.07¾
34 Sundebloom Neutral	.08½	.08¾	.08½	.08¾	.08½	.08¾
36 Miners' Neutral	.07¼	.07½	.07¼	.07½	.07¼	.07½
300 Mineral Seal	.08¼	.08½	.08¼	.08½	.08¼	.08½
CALIFORNIA—						
38-40 water white (high burning test)	.07½	.08	.07½	.08	.07½	.08
Engine distillate, 43-45 445 end point	.09¾	.10	.09¾	.10	.09¾	.10
Engine distillate, 42-44 480 end point	.09¼	.09½	.09¼	.09½	.09¼	.09½
CHICAGO DISTRICT (Based on Group 3)—						
41-43 water white Kerosene	.09½		.09½	.09¾	.09½	.09¾
42-44 water white Kerosene	.10	.10¼	.10	.10¼	.10	.10¼

*Colorado points.

FUEL OILS

	Sept. 14		Sept. 7		Aug. 31	
KANSAS—						
24-26 Fuel Oil	1.55	1.60	1.60	1.65	1.55	
32-36 Gas Oil	.04⅝	.04¾	.04⅝	.04¾	.04⅝	.04¾
38-40 Distillate	.05⅞	.06	.05⅝	.05⅞	.05½	.05¾
OKLAHOMA (Group 3)—						
Below 22 Fuel Oil (sellers' cars)	1.32½	1.35	1.35	1.40	1.35	
22-26 Fuel Oil (sellers' cars)	1.37½	1.40	1.40	1.45	1.40	1.42½
24 26 Fuel Oil (sellers' cars)	1.45	1.47½	1.47½	1.50	1.45	1.50
26-30 Fuel Oil (sellers' cars)	1.60		1.60	1.65	1.55	1.60
28-30 Fuel Oil (sellers' cars)	1.65	1.70	1.70	1.75	1.65	1.70
32-36 Gas Oil (cracking stock)	.04¼	.04½	.04¼	.04½	.04¼	.04½
36-38 Distillate	.05¼	.05½	.05¼	.05½	.05¼	.05½
38-40 Straw Distillate	.05½	.05⅝	.05½		.05½	
NORTH TEXAS—						
24-26 Fuel Oil (sellers' cars)	1.50		1.50	1.52½	1.50	1.55
32-36 Gas Oil (straw)	.04¼	.04½	.04⅜	.04½	.04⅜	.04½
38 40 Straw Distillate	.05¼	.05½	.05¼	.05½	.05¼	.05½
NORTH LOUISIANA—						
18-20 Fuel Oil	1.35	1.40	1.35	1.40	1.35	1.40
32-36 Gas Oil (straw)	.04¾	.05	.04¾	.05	.04¾	.05
32-36 Gas Oil (dark)	.04½	.04¾	.04½	.04¾	.04½	.04¾
36-38 Distillate	.05	.05¼	.05	.05¼	.05	.05¼
ARKANSAS—						
38-40 Distillate	.05¼	.05½	.05½		.05¼	.05½
32-36 Gas Oil (straw)	.04¾	.05	.04½	.04¾	.04½	.04¾
16-20 Refinery Fuel Oil	1.25	1.30	1.27½	1.30	1.25	1.30
GULF COAST (South Texas)—						
Gas Oil	.05⅝	.05¾	.05⅝	.05¾	.05⅝	.05¾
Fuel Oil	1.75	1.85	1.75	1.85	1.75	1.85
PENNSYLVANIA—						
30 34 Fuel Oil	.05¾	.05⅞	.05¾	.05⅞	.05¾	.05⅞
36-40 Fuel Oil	.06½	.06⅝	.06½	.06⅝	.06¼	.06½
CALIFORNIA—						
33-36 Distillate	.04	.04¾	.04	.04¾	.04	.04¾
27-32 Distillate	.03¾	.04	.03¾	.04	.03¾	.04
15-20 Fuel Oil (at tide water)	1.00	1.04	1.00	1.04	1.00	1.04
27 plus Diesel	1.15	1.19	1.15	1.19	1.15	1.19
CHICAGO DISTRICT (Based on Group 3)—						
24-26 Fuel Oil (sellers' cars) Group 3	1.45	1.50	1.45	1.50	1.45	1.47½
22-26 Fuel Oil (sellers' cars) Group 3	1.40	1.45	1.40	1.45	1.37½	1.42½
18-22 (Group 3)	1.35	1.40	1.35	1.40	1.35	1.37½
18-20 (Smackover)	1.25	1.30	1.25	1.30	1.25	1.30
32-36 Gas Oil	.04¼	.04⅜	.04¼	.04½	.04¼	.04⅜
36 38 Distillate	.05¼	.05½	.05¼	.05½	.05¼	.05⅜
38-40 Straw Distillate	.05½	.06	.05½	.06	.05½	.05¾

LUBRICATING OILS AND WAX

	Sept. 14		Sept. 7		Aug. 31	
OKLAHOMA (Group 3)—						
70-80 vis., 2½ color, 20-25 cold test	.06	.07	.06	.07	.06	.07
100 vis., 2 color, 20-25 cold test	.07	.07½	.07	.07½	.07	.07½
100 vis., 3 color, 20-25 cold test	.06½	.07	.06½	.07	.06½	.07
150 vis., 3 color, 20-25 cold test	.09½	.10	.09½	.10	.09¼	.10
150 vis., 4 color, 20-25 cold test	.09¾		.09¾		.09¾	
180 vis., 3 color, 23-28 cold test	.10½	.11½	.10½	.11½	.10½	.11½
180 vis., 4 color, 23 28 cold test	.10	.10½	.10	.10½	.10	.10½
200 vis., 3 color, 23-28 cold test	.10¾	.12¼	.10¾	.12¼	.10¾	.12¼
200 vis., 4 color, 23-28 cold test	.11¼	.11½	.11¼	.11½	.11¼	.11½
220 vis., 3 color, 25-30 cold test	.13	.13½	.13	.13½	.13½	.14
220 vis., 3 color, 25-30 cold test	.13		.13		.13	
240 vis., 3 color, 25-30 cold test	.14	.15	.14	.15	.14½	.15
240 vis , 4 color, 25-30 cold test	.14	.14½	.14	.14½	.14	.14½
280 vis., 3 color, 25-30 cold test	.16	.17	.16	.17	.16½	.17
280 vis., 4 color, 25-30 cold test	.15½	.16½	.15½	.16½	.15½	.16½
180 vis., 5 color, 23-28 cold test	.09¾	.10¼	.09¾	.10¼	.09¾	.10¼
200 vis., 5 color, 23 28 cold test	.10	.11¼	.10	.11¼	.10¾	.11¼
220 vis., 5 color, 25-30 cold test	.12	.12¼	.12	.12¼	.12	.12¾
240 vis., 5 color, 25-30 cold test	.13	.14	.13	.14	.13	.14
280 vis., 5 color, 25-30 cold test	.15	.16	.15	.16	.15	.16
Cylinder Stocks:						
600, steam refined, dark green	.08	.11	.08	.11	.08	.11
600, steam refined, light green	.06	.07	.06	.07	.06	.06½
190-200 vis. @ 210 "D" Bright Stock	.33	.35	.33	.35	.33	.35
150 vis. @ 210 "D" Bright Stock	.28	.31	.28	.31	.28	.31
200-210 vis. @ 210 "E" Bright Stock	.30	.31	.30	.31	.30	.31
150 vis. @ 210 "E" Bright Stock	.27	.28	.27	.28	.27	.28
Waxes:						
124-126 White Crude Scale Wax	.04¾		.04¾		.04¾	
PENNSYLVANIA—						
150, 3 color	.23¼		.23¼		.23¼	
180, 3 color	.26½		.26½		.26½	
200, 3 color	.29		.29		.29	
220, 3 color	.31		.31		.31	
600, steam refined	.12½		.13		.13	
635, steam refined	.15½		.16⅞		.16⅞	
650, steam refined	.17¼		.17½		.17½	

REFINERY AND CRUDE PRICES

Quotations on Principal Refined Products and Crude Petroleum Markets in All the American Oil Fields

600, Pennsylvania flash	.21		.23		.23	
630, Pennsylvania flash	.32½		.32½		.33	
*550, E filtered	.19		.19		.19	
600, E filtered	.21½		.20		.20	
*600, E filtered	.21½		.20½		.20½	
600, D filtered	.27		.27		.27	
550, E filtered	.18		.18		.18	
550, D filtered	.22		.22		.22	
Pennsylvania Bright Stock	.41½		.41½		.41½	
122-124 White Crude Scale Wax	.05¼	.05⅜	.05¼	.05⅜	.05¼	.05⅜
†124-126 White Crude Scale Wax	.05¾	.05½	.05¾	.05½	.05¾	.05½

*At Warren, Pa. †At New York City.

GULF COAST (South Texas)—						
Zero Black	.06	.07	.06	.07	.06	.07
No. 2 color, 100 vis., pale oil	.08½	.09	.08½	.09	.08½	.09
No. 3 color, 200 vis., pale oil	.11½	.12	.11½	.12	.11½	.12
No. 3½ color, 300 vis., pale oil	.12½	.13	.12½	.13	.12½	.13
No. 3¾ color, 500 vis., pale oil	.14	.14½	.14	.14½	.14½	.15
No. 4 color, 750 vis., pale oil	.17½	.18½	.17½	.18½	.17½	.18
No. 2 plus color, 200 vis., pale filtered	.21½		.21½		.21½	
No. 2 color, 300 vis., pale filtered	.24½		.24½		.24½	
No. 2½ color, 500 vis., pale filtered	.27½		.27½		.27½	
No. 2½ color, 750 vis., pale filtered	.35½		.35½		.35½	
No. 5 to 6 color, 200 vis., red oil	.10	.10½	.10	.10½	.10	.10½
No. 5 to 6 color, 300 vis., red oil	.11½	.12	.11½	.12	.11½	.12
No. 5 to 6 color, 500 vis., red oil	.12½	.13	.12½	.13	.12½	.13
No. 5 to 6 color, 750 vis., red oil	.16½	.17	.16½	.17	.16½	.17
CALIFORNIA—						
130 vis, 2½-3 color	.10	.11½	.10	.11½	.10	.11½
200 vis., 2½ 3 color	.13½	.14½	.13½	.14½	.13½	.14½
300 vis., 3 -3½ color	.15	.16	.15	.16	.15	.16
350 vis., 3½-4 color	.16½	.17½	.16½	.17½	.16½	.17½
400 vis., 3½-4 color	.18	.19	.18	.19	.18	.19
Red Neutrals:						
200 vis., 3½-5 color	.12	.13	.12	.13	.12	.13
300 vis., 5 -6 color	.13	.14	.13	.14	.13	.14
400 vis., 5 -6 color	.15	.16	.15	.16	.15	.16
500 vis., 4½-5 color	.18	.19	.18	.19	.18	.19
500 vis., 6 -6½ color	.16	.17	.16	.17	.16	.17
600 vis., 6½ plus color	.17	.18	.17	.18	.17	.18

Note: Bright stocks are not manufactured commercially on the Pacific Coast.

NEW YORK (BAYONNE) REFINERY PRICES

Gasoline:	Sept. 14	Sept. 7	Aug. 31
U. S. Motor, 58-60 437	.13	.13	.13
Export, 64 66 375	.15	.15	.14
Kerosene, prime white, 41-43	.11	.11	.11
*Bunker Oil "C" 14-16, per bbl.	1.75	1.75	1.75
*Diesel Oil, 28-30, per bbl.	2.50	2.50	2.50
Gas Oil, 28 plus	.06¾	.06¾	.06¾
Furnace Oil (tankwagon)	.12	.11½	.11½
Cylinder Oil, light filtered, 600 s.r.	.29	.29	.29
Bright Stock, No. 5, 150 vis., at 212 F.	.42	.42	.42
White Neutral, No. 1, 170 vis., 1 color	.37	.37	.37
Spindle Oil, No. 1 red, 230 vis., 5½ color	.17½	.17½	.17½
Pale Oil, "25," 170 vis., 3½ color	.13	.13	.13
Pale Oil, "28," 100 vis., 2 color	.08	.08	.08
Red Oil:			
No. 3, 160 vis., 7 color	.11	.11	.11
No. 2, 212 vis., 5½ color	.12	.12	.12
No. 1, 265 vis., 5½ color	.13½	.13½	.13½
Polar, 295 vis., 6 color	.14	.14	.14
Paraffin Wax, refined:			
120-122 a.m.p., per lb.	.05⅞	.05⅞	.06
125-127 a.m.p., per lb.	.06	.06	.06½
130-132 a.m.p., per lb.	.06½	.06½	.06½
135-137 a.m.p., per lb	.06¾	.06¾	.07
Petrolatum, in bbls., per lb.:			
Dark green	.01⅞	.01⅞	.01⅞
Amber	.03¼	.03¼	.03⅜
Cream	.05¾	.05¾	.05½
Lily white	.07⅞	.07⅞	.07½
Snow white	.08¾	.08¾	.08½

*Lighterage 5.5c a barrel extra.

NEW YORK CASE EXPORT PRICES

	Sept. 14	Sept. 7	Aug. 31
Gasoline, U. S. Motor, 58-60	.28.90	.28.90	.28.90
Kerosene:			
Standard white Kerosene	.19.65	.19.65	.19.65
Water white Kerosene	.21.15	.21.15	.21.15

LOS ANGELES EXPORT PRICES

	Sept. 14		Sept. 7		Aug. 31	
Kerosene water white	.05½	.06½	.05½	.06½	.05½	.06½
U. S. Motor Gasoline, 54-56 437 e.p.	.10	.10½	.10	.10½	.10	.10½

CRUDE OIL PRICES

OKLAHOMA, KANSAS AND NORTH TEXAS

***Prairie Oil & Gas Co.**
(Oklahoma, Kansas and North and East Central Texas)
(Effective May 15)

28° to 28.9°	$1.65
29° to 29.9°	1.73
30° to 30.9°	1.81
31° to 31.9°	1.89
32° to 32.9°	1.97
33° to 33.9°	2.05
34° to 34.9°	2.13
35° to 35.9°	2.21
36° to 36.9°	2.29
37° to 37.9°	2.37
38° to 38.9°	2.45
39° to 39.9°	2.53
40° to 40.9°	2.61
41° to 41.9°	2.69
42° to 42.9°	2.77
43° to 43.9°	2.85
44° to 44.9°	2.93
45° to 45.9°	3.01
46° to 46.9°	3.09
47° to 47.9°	3.17
48° to 48.9°	3.25
49° to 49.9°	3.33
50° to 50.9°	3.41
51° to 51.9°	3.49
52° and above	3.57

*Other major purchasers except as noted below.

Champlin Refining Co.
(Garber and Tonkawa)
(Effective May 15)

Schedule based on Prairie Oil & Gas Co. paying 10 cents additional for each grade of crude above 38° gravity.

Humble Oil & Refining Co.
(Effective May 15)
(North and East Central Texas, Ranger, Mexia, Powell, Richland, Wortham, Currie, Moran, Big Lake, Nacona and Lytton Springs)

Same prices as Prairie Oil & Gas Co. schedule. Postings below 28° gravity 8 cents less for each degree, effective June 21.

Magnolia Petroleum Co.
Effective May 15)

Oklahoma, Kansas and North and East Central Texas, except Corsicana heavy, and Lytton Springs of South Central Texas)

Below 28°	$1.30

Other grades same as Prairie Oil & Gas Co.

Iatan	$1.15
Corsicana heavy	1.25
Panola County:	
30° to 34.9°	$1.95
35° to 37.9°	2.10
38° and above	2.25

TEXAS PANHANDLE

Kay County Gas Co.
(Effective May 15)

28° to 28.9°	$1.35
29° to 29.9°	1.40
30° to 30.9°	1.45
31° to 31.9°	1.50
32° to 32.9°	1.55
33° to 33.9°	1.60
34° to 34.9°	1.65
35° to 35.9°	1.70
36° to 36.9°	1.75
37° to 37.9°	1.80
38° to 38.9°	1.85
39° and above	1.90

Humble Oil & Refining Co.
(Effective June 21)

39° to 39.9°	$1.90
40° to 40.9°	1.95
41° to 41.9°	2.00
42° to 42.9°	2.05
43° to 43.9°	2.10
44° and above	2.15

Grades below 39° gravity same as posted by the Kay County Gas Co.

Magnolia Petroleum Co.
(Effective September 14)

Below 34°	1.15
34° to 35.9°	1.25
36° to 37.9°	1.35
38° and above	1.45

WEST TEXAS

Kay County Gas Co.
(Crane, Upton and Crockett Counties.)
(Effective August 11)

Below 26°	$1.20
26° to 26.9°	1.25
27° to 27.9°	1.30
28° to 28.9°	1.35
29° to 29.9°	1.40
30° to 30.9°	1.45
31° to 31.9°	1.50
32° to 32.9°	1.55
33° to 33.9°	1.60
34° to 34.9°	1.65
35° to 35.9°	1.70
36° and above	1.75

GULF COAST

***Humble Oil & Refining Co.**
(Effective August 30)

Grade A	$1.40
Grade B—	
Below 25°	1.40
25° to 25.9°	1.45
26° to 26.9°	1.50
27° to 27.9°	1.55
28° to 28.9°	1.60
29° to 29.9°	1.65
30° to 30.9°	1.70
31° to 31.9°	1.75
32° to 32.9°	1.80
33° to 33.9°	1.85
34° to 34.9°	1.90
35° and above	1.95
Spindletop	
Grade A	$1.25
Grade B—	
Below 25°	1.25
25° to 25.9°	1.30
26° to 26.9°	1.35
27° to 27.9°	1.40
28° to 28.9°	1.45
29° to 29.9°	1.50
30° to 30.9°	1.55
31° to 31.9°	1.60

*All major purchasers except as noted below. Sun Pipe Line Co. prices effective September 1.

The Texas Company
(Effective August 30)

Grade A	$1.40
Grade B	1.40
†Light Crude—	
35° to 35.9°	1.95
36° to 36.9°	2.00
37° to 37.9°	2.05
38° to 38.9°	2.10
39° to 39.9°	2.15
40° and above	2.20

†The Texas Company's postings on light crude under 35° gravity are same as Humble Oil & Refining Co.'s grades and prices for Grade B crude. Spindletop prices same as for Humble Oil & Refining Co., but classified according to The Texas Company's general schedule to 31° to 31.9° crude.

SOUTH CENTRAL AND SOUTHWESTERN TEXAS

***Magnolia Petroleum Co.**	
Luling (contract) (Eff. May 18)	$1.30
Mirando (Webb, Jim Hogg and Zapata Counties) (May 15)	1.25
Rockdale-Minerva (Milam County)	1.25
Thrall	1.00
Calliham (Live Oak and McMullen Counties) (May 15)	1.75
‡Lockhart (Lytton Springs)	
Somerset (Grayburg Pipe Line Co.): (Effective May 17)	
28° to 28.9°	$1.25
29° to 29.9°	1.35
30° to 30.9°	1.71
31° to 31.9°	1.89
32° to 32.9°	1.97
33° to 33.9°	2.05
34° to 34.9°	2.13
35° to 35.9°	2.20
36° to 36.9°	2.29
37° to 37.9°	2.37
38° and above	2.45

*Texpata Pipe Line Co. and Humble Pipe Line Co. also post in Mirando Field.
‡Lockhart prices same as for North and East Central Texas. Lockhart posted by Magnolia Petroleum Co. and Humble Oil & Refining Co.

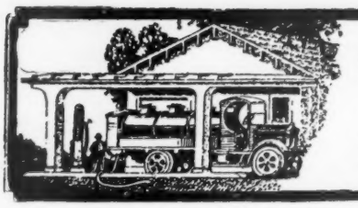
ARKANSAS AND NORTH LOUISIANA

Standard Oil Co. of Louisiana
(Effective May 18)

Caddo:	
Below 26° (July 24)	$1.40
26° to 28.9° (July 24)	1.55
29° to 31.9° (July 24)	1.70
32° to 34.9°	2.25
35° to 37.9°	2.35
38° and above	2.45
Homer below 31°	1.85
31° to 32.9°	2.00
33° to 34.9°	2.10
35° and above	2.20
Haynesville below 33°	2.00
33° and above	2.10
El Dorado below 33°	2.00
33° to 34.9°	2.10
35° to 36.9°	2.20
37° and above	2.30
Bull Bayou, 32° to 34.9°	1.95
35° to 37.9°	2.10
38° and above	2.25
Cotton Valley	1.20
DeSoto	2.30
Crichton	2.10
Bellevue	1.50
Smackover, below 24°	1.10
24° to 24.9	1.35
25° to 25.9°	1.40
26° to 26.9°	1.45
27° and above	1.50
*Stephens, Ark., below 26°	1.45
26° and above	1.65
†Calion (East El Dorado)	1.10
‡Urania (August 26)	1.10

Other companies posting in these fields are: Gulf Pipe Line Co.; Atlantic Oil Producing Co. in Homer Haynesville, El Dorado and Smackover; The Texas Com-

(Continued on Page 158)



TANK WAGON MARKETS

Tankwagon quotations for gasoline and kerosene in United States as furnished by the larger marketing concerns, Sept. 14.

ALL TANK WAGON AND SERVICE STATION QUOTATIONS INCLUDE TAXES

STANDARD OIL CO. (INDIANA)
Main Service Station Price

	Gasoline Tank wagon	Gasoline Service station	Gasoline Inclds tax of	Kero. Tank wagon
Chicago Dist.—				
†Less than 100 gals.	19.0	21.0	...	15.5

Tank wagon prices on April 19, 1922; g. up 1½c; May 8, up 1c; June 27, g. and k. up 1c; July 19, g. down 2c; k. down 1c; Oct. 10, g. down 2c; Oct. 21, g. down 1c; Feb. 5, 1923, g. up 1c; Feb. 20, g. up 1c; Aug. 14, g. down 6.6c; Oct. 4, k. down 1½c; Nov. 10, g. down 1.4c; Dec. 20, g. up 2c; Jan. 12, 1924, g. up 2c; k. up 1c; Feb. 5, g. up 2c, k. 1c; July 18, g. down 1c; July 20, g. and k. down 1c; Sept. 12, g. down 2c; Jan. 23, 1925, g. up 1c; Jan. 26, g. up 1c; Jan. 31, g. up 1c; Feb. 12, g. up 2c, k. up 1c; April 19, g. down 1c; July 14, g. up 1c; Aug. 25 g. down 2c, k. down 1c; Sept. 1, g. down. 1c; Feb. 4, 1926, g. up 1c; k. up 1c; April 16, 1926, k. up 1c; April 24, 1926, k. up ½c; April 29, 1926, g. up 1c, k. up ½c; May 6, 1926, k. up ½c; May 17, g. and k. up 1c; July 1, k. down 1c; July 3, k. down 1c; Aug. 13, k. up 1c; Aug. 24, k. up 1c.

Decatur, Ill.	19 2	21 2	...	16 0
E. St. Louis	18 1	20.35	...	15 1
Joliet	19 4	21.4	...	16 2
Peoria	19 2	21 2	...	16 0
Quincy	19 2	21.2	...	15 8
Davenport, Ia.	21 5	23.5	2 0	16 4
Des Moines	21.5	23 5	2 0	16.4
Keokuk	21 5	23.5	2 0	16 4
Sioux City	18.9	20.9	2.0	16.0
Duluth, Minn.	22.5	24.5	2.0	17 1
Minneapolis	22.5	24.2	2.0	17.1
La Cross, Wis.	22 2	24 2	2 0	16.9
Milwaukee	21 1	23 1	2 0	15 8
Madison	21 3	23 3	2 0	16.0
Detroit, Mich.	21.8	23.8	2 0	16 7
Grand Rapids	21 7	23 7	2 0	16.6
Saginaw	21 9	23 9	2 0	16 8
Evansville, Ind.	22 0	24.0	3 0	16 0
Ft. Wayne	22 4	24 4	3 0	16 4
Indianapolis	22.2	24.2	3 0	16 2
South Bend	22.4	24.4	3.0	16.4
Fargo, N. D.	23 9	25 9	3 0	19 1
Huron, S. D.	23 5	25 5	3.0	17 6
Sioux Falls	22.0	24 0	3 0	17 1
*K. C., Mo.	21 9	23 9	3.0	14.8
*Springfield	21 8	23 8	3 0	15 7
*St. Louis	22 5	24 5	3 5	15 5
*St. Joseph	21 0	23 0	2 5	15 4
†Wichita, Kan.	19 8	21.8	2.0	15.3
Bartlesville, Ok.	20 8	22 8	3.0	15.3

NAPHTHAS

	Tank wagon	Tank car
Oleum spirits	21.0	15.0
V. M. & P. naphtha	23 0	16 5
Cleaners naphtha	21 0	17 5

Tank wagon prices f.o.b. Chicago; tank car prices f.o.b. Whiting.

*State tax is 2c. Remainder is city tax.
†Quantity price on more than 100 gallons, 18.0.
‡At all Kansas points a discount of 1 cent a gallon is allowed from the tankwagon postings on dumps of 50 gallons or more.

The following monthly rebate system is effective on tankwagon schedules throughout the territory of Standard Oil Co. of Indiana: Over 750 gallons, ½c; over 2,000 gallons, ¾c; over 3,000 gallons, 1c; over 6,000 gallons 1½c; over 10,000 gallons, 2c. If quantity bought during the year is equal to 12 times the monthly agreed purchases the discount will be paid or credited on the entire quantity less monthly payments. Service station customers will receive discount of 1 cent a gollon on purchases amounting to 200 gallons a month or 2,400 gallons a year; and 2 cents a gallon on 600 gallons a month or 7,200 gallons a year.

STANDARD FURNACE OIL
(Standard Oil Co. of Indiana)

Less than 100 gallons	10 0
100 to 399 gallons	9 5
400 or more gallons	9.0

SOUTHWESTERN DISTRICT

***Magnolia Petroleum Co.**

	Gasoline Tank wagon	Gasoline Service station	Gasoline Inclds tax of	Kero. Tank wagon
Dallas, Tex.	†17.0	17.0	1.0	14.0
Fort Worth	†17 0	17 0	1 0	14 0
Houston	†21 0	21 0	1 0	14 0
San Antonio	†19 0	19 0	1 0	14 0
El Paso	†21 0	21 0	1.0	15 0
Texarkana	†21.0	21.0	1.0	15.0
Muskogee, Ok.,	20.0	23.0	3.0	15.0
Oklahoma City	18.0	21.0	3.0	15.0
Tulsa	20.0	23.0	3.0	15.0
Little Rock	22 0	25 0	4 0	15 5
Ft. Smith, Ark.	22.0	25.0	4 0	15 5

*The following is the schedule of discounts on quantity gasoline sales adopted by the Magnolia Petroleum Co. in Oklahoma: Over 750 gallons a month, ½c; over 2,000 gallons, ¾c; over 3,000 gallons, 1c; over 4,500 gallons, 1¼c; over 6,000 gallons, 1½c; over 8,000 gallons, 1¾c; over 10,000 gallons, 2c. If the quantity bought during the year is 12 times the monthly agreed purchases, the discount will be paid or credited on the entire quantity for the year less any monthly purchases.

The schedule on service station deliveries is: Over 200 gallons a month, 1c; over 300 gallons a month, 1¼c; over 400 gallons, 1½c; over 500 gallons a month, 1¾c; over 600 gallons, 2c. The same rule applies for annual purchases as in the tankwagon discounts.

†Magnolia maintains only a retail schedule in Texas with dealers and large consumers allowed a flat 3-cent discount, except at El Paso where the discount is only 2 cents.

CENTRAL SOUTH DISTRICT

Standard Oil Co. (Louisiana)

	Gasoline Tank wagon	Gasoline Service station	Gasoline Incldg tax of	Kero. Tank wagon
*New Orleans	20 5	23 5	3 0	16 0
Alexanderia	20 0	23 0	2 0	17.0
Baton Rouge	19.0	22 0	2 0	15.5
LaFayette	20.0	23 0	2 0	16 5
Lake Charles	20 5	23 5	2 0	17 5
Shreveport, La.	19 0	22 0	2.0	16 0
Memphis, Tenn.	20 0	23 0	3.0	17 0
Chattanooga	23 5	26.5	3 0	17 5
Knoxville	23 5	26.5	3 0	18 0
Nashville	21 0	24 0	3 0	18.0
Bristol	24 0	27 0	3 0	17.5
Little Rock Ark	22.0	25.0	4.0	16 0

*Tax of 3c includes city tax of 1c.
*Louisiana kerosene prices include 1-cent State tax.

SOUTHERN DISTRICT

Standard Oil Co. (Kentucky)

	Gasoline Tank wagon	Gasoline Service station	Gasoline Incldg tax of	Kero. Tank wagon
Atlanta, Ga.	25.0	28 0	3 5	19.0
Augusta	25 0	28 0	3 5	19 0
Macon	25 0	28 0	3 5	19 0
Savannah	23 0	25 0	3 5	17.0
Birm'ghm, Ala.	22 0	25.0	2 0	18 5
Mobile	21 0	24 0	2 0	17 0
Montgomery	23 0	26 0	3 0	19 5
Clarksdale, Miss	23 0	26 0	4.0	16 5
Jackson	23 0	26 0	4 0	16.5
Natchez	22 5	25 5	4 0	16 0
Vicksburg	22 5	25 5	4.0	16 0
Jack'ville, Fla.	23 0	26 0	4 0	17 0
Miami	25.0	28 0	4 0	18 5
Pensacola	23 0	26 0	4 0	17 5
Tampa	23 0	26 0	4.0	17.0
Covington	24 0	27 0	5 0	18 0
Louisville	24 0	27 0	5 0	17 0
Lexington, Ky.	25.0	28.0	5.0	18.0

In addition to the state tax of 2c on gasoline, Montgomery has city tax of 1c on gasoline and ½c on kerosene. Prices in Georgia include ½c inspection fee on gasoline and kerosene; in Florida, an inspection fee of 0.125c; in Alabama, an inspection fee of ½c on kerosene only.

ROCKY MOUNTAIN DISTRICT

Continental Oil Co.

	Gasoline Tank wagon	Gasoline Service station	Gasoline Incldg tax of	Kero. Tank wagon
Denver, Colo.	22 0	22 0	2.0	18 0
Pueblo	22 0	24 0	2 0	18 0
Grand Jct.	26.0	28.0	2.0	22.0
Casper, Wyo.	22 5	24 5	2.5	16 5
Cheyenne	23.5	25 5	2 5	18 0
Butte, Mont.	24 0	24 0	2 0	20 5
Helena	26.0	28 0	2 0	20 5
Salt Lake, Utah	26 0	28 0	3.5	19 0
Boise, Idaho	27.0	29.0	3 0	21.0
Albuquerque, N. Mex.	28 5	28 5	3.0	20.0

ATLANTIC COAST DISTRICT

Standard Oil Co. (New Jersey)

	Gasoline Tank wagon	Gasoline Service station	Gasoline Incldg tax of	Kero. Tank wagon
Atlantic City	19 0	...	...	17 0
Newark, N. J.	19 0	21.0	...	17.0
Annapolis, Md.	21 0	...	2 0	17 0
Baltimore	21 0	24 0	2 0	17.0
Cumberland	21 0	24.0	2.0	17 0
Washington	21 0	24 0	2 0	17.0
Danville, Va.	23 5	...	4 5	17 0
Norfolk	23.5	26 5	4 5	17 0
Petersburg	23 5	26 5	4.5	17.0
Roanoke	23 5	26.5	4.5	17 0
Richmond	23 5	26.5	4.5	17.0
Charleston, W. Va.	21 5	24 5	3 5	17 0
Keyser	22 5	...	3.5	17 0
Parkersburg	21 5	24.5	3.5	17 0
Wheeling	21 5	24 5	3.5	17 0
Charlotte, N. C.	23 5	26 5	4 0	17 0
Hickory	23 5	...	4 0	17 0
Mt. Airy	23 5	26 5	4.0	17.0
Salisbury	23 5	26.5	4 0	17 0
Charleston, S.C.	24 5	27 5	5 0	17.0
Columbia	24 5	27 5	5.0	17.0

NEW YORK AND PART OF NEW ENGLAND DISTRICT

Standard Oil Co. (New York)

	Gasoline Tank wagon	Gasoline Service station	Gasoline Incldg tax of	Kero. Tank wagon
Albany, N. Y	17.0	....	...	18 0
*New York	21 0	....	...	18.0
Buffalo	20 0	....	...	18 0
Rochester	21 0	....	...	16 0
Syracuse	21 0	....	...	18 0
Boston, Mass.	21 0	....	...	18 0
Augusta, Me.	24 0	....	3.0	18.0
Manchester, N. H.	23 0	....	2 0	18 0
Burlington, Vt.	23 0	....	2.0	18.0

*Price in steel barrels.
Note: Standard Oil Co. of New York does not generally quote service station price in its territory. In most cases the service station price is 2 to 3 cents higher than tankwagon price.

NEBRASKA

Standard Oil Co. (Nebraska)

	Gasoline Tank wagon	Gasoline Service station	Gasoline Incldg tax of	Kero. Tank wagon
Omaha	21.25	23 25	2 0	16.0
McCook	22 75	24 75	2.0	17.5
Norfolk	21.75	23 75	2.0	16.5
N. Platte	22 75	24.75	2.0	17.25
Scottsbluff	22 25	24.25	2.0	16.75

PACIFIC COAST DISTRICT

Standard Oil Co. (California)

	Gasoline Tank wagon	Gasoline Service station	Gasoline Incldg tax of	Kero. Tank wagon
San Francisco	18.0	22 0	2 0	15.5
Los Angeles	16 5	20 5	2 0	15 0
Fresno	18.5	22.5	2.0	17.5
Reno, Nev.	23 5	27 5	4.0	19.0
Portland, Ore.	19.0	23 0	3.0	16.5
Seattle, Wash.	18.0	22 0	2.0	16.5
Spokane	22 0	26.0	2 0	20.5
Tacoma	18 0	22 0	2.0	16.5
Phoenix, Ariz.	25 0	28 0	3.0	21.5

PENNSYLVANIA-DELAWARE AND PART NEW ENGLAND

Atlantic Refining Co.

	Gasoline Tank wagon	Gasoline Service station	Gasoline Incldg tax of	Kero. Tank wagon
*Pittsburgh, Pa	20 0	25 0	...	17.0
*Philadelphia	20 0	25 0	...	17.0
*Scranton	20 0	25 0	...	17.0
*Allentown	20 0	25 0	...	17.0
Altoona	20.0	25 0	...	17.0
*Erie	18 0	23 0	...	15.0
Dover, Del.	22 0	25 0	2 0	17 0
Wilmington	22.0	25 0	2.0	17.0
Spring'd, Mass.	21 0	23 0	...	18.0
Worchester	21.0	23 0	...	18.0
Boston	21 0	23 0	...	18.0
Providence, R.I.	22 0	24 0	1.0	18 0
Hartford, Conn.	23.0	26.0	2.0	17.0
New Haven	23 0	26 0	2.0	18.0

*Pennsylvania tax of 2c is collected by the dealer and paid by him direct to the State.

OHIO

Standard Oil Co. (Ohio)

	Gasoline Tank wagon	Gasoline Service station	Gasoline Incldg tax of	Kero. Tank wagon
All Ohio points	22.0	24.0	2.0	17.0

TANKWAGON PRICE CHANGES

September 3.—Standard Oil Co. of Ohio advanced kerosene 1 cent.

September 10—Magnolia Petroleum Co. advanced kerosene at Oklahoma City, Tulsa and Muskogee, 1 cent.

CRUDE PRICE CHANGES

September 8.—Sunburst, Mont., crude advanced 10 cents.

September 9—Indian Refining Co. posted flat price of $2.10 for all western Kentucky crude. This was a reduction of from 10 to 30 cents under the former graded schedule.

September 14—Magnolia Petroleum Co. revised its schedule for Panhandle, Texas, crude, establishing four grades to supplant the 12 grades previously posted. The revision meant reductions of from 20 to 45 cents a barrel.

CALIFORNIA CRUDE PRICES
***Standard Oil Co.-Union Oil Co.**
(Effective March 11)

Gravity—	Long Beach Huntington Beach Richfield Brea-Olinda Dominguez Torrance-Inglewood	Whittier La Habra Montebello	Kern River Newhall-McKittrick Midway-Sunset Elk Hills Lost Hills Belridge	Coyote	Santa Fe Springs	Coalinga	Wheeler Ridge	Santa Maria Ventura Salt Lake
14°	.85	.85	.75	.85	....	.75	.75	.85
15°	.87	.85	.75	.85	....	.76	.75	.85
16°	.90	.85	.75	.85	....	.76	.75	.85
17°	.94	.85	.75	.85	....	.75	.75	.85
18°	.98	.86	.75	.86	....	.75	.75	.85
19°	1.04	.87	.75	.87	....	.75	.75	.85
20°	1.10	.89	.82	.90	.89	.79	.78	.90
21°	1.16	.91	.90	.98	.91	.86	.81	.97
22°	1.22	.94	1.00	1.06	.94	.93	.85	1.04
23°	1.28	.97	1.11	1.14	.97	1.00	.89	1.11
24°	1.34	1.01	1.22	1.22	1.02	1.07	.93	1.18
25°	1.40	1.05	1.33	1.30	1.08	1.14	.97	1.25
26°	1.46	1.09	1.44	1.38	1.16	1.21	1.01	1.32
27°	1.52	1.13	1.55	1.46	1.24	1.28	1.05	1.39
28°	1.58	1.17	1.66	1.54	1.32	1.35	....	1.46
29°	1.64	1.21	1.77	1.62	1.40	1.42	....	1.53
30°	1.70	1.25	1.88	1.70	1.48	1.49	....	1.60
31°	1.76	....	1.99	....	1.60	1.56	....	1.67
32°	1.84	....	2.10	....	1.72	1.63	....	1.73
33°	1.92	....	2.21	....	1.84	1.70	....	1.79
34°	2.00	....	2.32	....	1.96	1.77	....	1.85
35°	2.08	....	....	....	2.08	1.84	....	1.92
36°	2.16	....	....	....	2.16	....	....	....
37°	2.24	....	....	....	2.24	....	....	....
38°	2.34	....	....	....	2.34	....	....	....
39°	2.44	....	....	....	2.44	....	....	....
40°	2.54	....	....	....	....	....	....	....
41°	2.64	....	....	....	....	....	....	....
42°	2.74	....	....	....	....	....	....	....

*Column 2—Long Beach and Huntington Beach crudes, 14 to 32 degrees, inclusive; Richfield and Brea-Olinda, 14 to 30 degrees; Torrance and Inglewood, 14 to 28; Domingues, 24 to 42 degrees. Rosecrans crude ranges from 14 to 42 degrees, but only Union Oil Co. posts below 24 degrees.
Column 3—Whittier and La Habra crudes, 14 to 22 degrees; Montebello, 14 to 30 degrees.
Column 4—Kern River, Newhall and McKittrick, 14 to 19 degrees; Midway-Sunset and Elk Hills, 14 to 33 degrees; Lost Hills and Belridge, 14 to 34 degrees.
Column 6—Santa Fe Springs. Only Union Oil Co. posts below 24 degrees.
Column 9—Salt Lake, 14 to 19 degrees, inclusive; Santa Maria, 14 to 30 degrees; Ventura, 14 to 35 degrees. Posted only by Union Oil Co.

NORTH TEXAS MARKET WAS SOMEWHAT EASIER

WICHITA FALLS, Tex., Sept. 13.—Some domestic buying of higher gravity gasolines proved practically the only point of interest in north Texas refined markets the past week. One large jobber in particular is reported to have purchased 50 cars of the 64-66 375 gasoline and also was in the market for 68-70 360 gasoline, although the latter is available only in limited quantities.

However, gasolines as a whole were somewhat easier than during the preceding week with concessions being offered freely, particularly on the 58-60 437 (U. S. Motor) material, which was available Tuesday at 10½ cents. The purchases of 64-66 375 gasoline were made at 11½ cents, but little material is available at that figure now. The 68-70 360 gasoline was bringing 12 cents.

A decided weakening also was felt in kerosenes due to the substantial falling off in demand. The 41-43 water white material was quoted as low as 9 cents in some cases and was more than plentiful at 9¼ cents.

The edge apparently was off natural gasolines and sellers found difficulty in moving material at some of the quotations asked. Concessions also were being offered. Moving prices were: Grade A and Double A, 10¼ to 10¾ cents; Grade B and Double B, 10 to 10⅛ cents, and Grade C, 9¾ to 10 cents.

Fuel oil, gas oil and distillates continued firm, although fuel oil was considerably easier. Market prices were unchanged despite some concessions.

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Oil Securities Active and Irregular

Some Issues Which Had Made Extensive Advances Receded. South America Thought to Boom Next Year

By N. O. Fanning

New York Bureau, The Oil and Gas Journal, 30 Church St., New York

NEW YORK, Sept. 13.—Oil securities were active and irregular during the past week. Some issues which had made extensive advances reacted under profit taking including Barnsdall, Shell Union, and Union Tank Car.

Interests in touch with foreign oil developments believe that the principal South American oil producing countries are going to witness a boom next year. There is already a small boom under way in some of them.

The Oil Conservation Board's report is looked upon with special significance with regard to the allusion to the importance of American companies' activities abroad. Oil men commenting on the report almost unanimously remarked upon that feature of it.

South America

It is believed that approximately $100,000,000 will be spent in oil exploration and development in Venezuela, Colombia, and Peru within the next twelve months.

Leading American oil interests believe South American oil will be needed to a larger extent as time goes by. It is their business to anticipate this, and that is why they are spending so much money in development now.

Amerada Corp.

Of the 109,775 additional shares of stock of the Amerada Corp., listing of which has just been approved by the New York Stock Exchange, 100,000 shares represents the second similar amount of treasury stock sold under option to Dillon, Read & Co. This second option is exercisable in all or part on or before January 31, 1927, and apparently exercising of part or all of the option is now contemplated. Funds are to be used to acquire additional domestic and South American properties.

As in the case of the previous application to the Exchange to list the first 100,000 shares of optioned stock, issued on July 28, last, the price paid by the bankers is not disclosed. With the additional stock issued, Amerada will have outstanding 223,075 shares. Of the 109,775 shares just listed, 7,000 are held for subscription by employes and 2,775 shares as part payment to the president for salary.

Continental Oil

The Continental Oil Co. is reported to have acquired the Peters Petroleum Corp. This involves production and acreage in the Mid-Continent field.

Creole Syndicate

The Creole Syndicate, operating in Venezuela, is negotiating for control of the Condor Oil Co. of Venezuela, Inc. Banking interests, including Blair & Co., Chase Securities Co., and Naphen & Co., have recently acquired a dominant interest in the Creole Syndicate. The same banking interests are identified with Lago Petroleum and Pan American Petroleum & Transport.

The Condor Oil Co. was controlled by British interests, including Cull & Co., A. Chester Beatty and C. S. Gulbenkian. Holdings of the company are largely in eastern and central Venezuela.

Galena Signal Oil

The Galena Signal Oil Co. has passed the quarterly dividends on both classes of 8 per cent preferred stock, old and new, due at this time.

In a letter to stockholders, prepared by order of the directors, the reasons for this action are set forth. It follows:

"In view of the funds needed for the further development and expansion of the company's business, and cash required for the payment of debenture interest and additional federal income tax assessments covering prior years, the directors deemed it to the ultimate best interests of the company and its stockholders that payment on the preferred stocks be deferred at this time.

"While the parent company, Galena-Signal Oil Co. of Pennsylvania, which has specialized in railroad lubrication for over 50 years, does not at present enjoy the same amount of business as formerly, due to the severity and nature of the competition it has encountered, it still maintains leadership in the railroad lubrication field because of the superior quality of its lubricants."

The statement adds that the company's largest subsidiary is the Galena Signal Oil Co. of Texas, which manufactures various oil products but not railroad lubricants. Development of facilities of this and other subsidiaries, including refineries, production, ships, etc., has progressed to where they represent a well rounded unit, except in direct marketing facilities, which has retarded potential earnings. Policies have been adopted in operating various subsidiaries to meet conditions and with a view to increasing earnings and resuming dividends.

Mexican Petroleum

The report of the Mexican Petroleum Co. of Delaware and its owned companies for the six months ended June 30, 1926, shows net profit of $14,020,326 after interest, amortization, depreciation, depletion and Federal taxes. This is equivalent after allowing for dividend requirements of $12,000,000 8 per cent preferred stock to $29.60 a share earned on 457,300 shares of common stock.

The consolidated profit and loss account of the Mexican Petroleum Co. of Delaware and its owned companies for the six months ended June 30, 1926, follows:

Operating profit	$19,941,806
Add: Int. & amort. charges	196,298
Total	$20,138,104
Depr. and depletion	3,927,778
Federal taxes	2,190,000
Net profit	$14,020,326

Skelly Oil

The conversion period of the $6,850,000 of 6½ per cent three-year gold notes of the Skelly Oil Co. expires September 30, 1926, although the notes do not mature until October 1, 1927. Nearly $6,000,000 of the notes have already been converted into a common stock at par.

Venezuelan Oil Concessions

The net profits of the Venezuelan Oil Concessions, Ltd., a subsidiary of the Dutch-Shell combine, for the year ended December 31, 1925, totaled £237,805, which, after deduction of £235,300 for 1924 deficit, leaves £2,505 to be carried forward. Production was 692,485 metric tons, against 391,134 in 1924.

Union Tank Car

The Union Tank Car will remove its headquarters from New York to Chicago in the near future.

General American Tank Car

The General American Tank Car Co. has declared the regular quarterly dividend of 1¾ per cent on the preferred stock, payable October 1 to stockholders of record September 1.

National Supply

The National Supply Co. has declared the regular quarterly dividend of $1.75 a share on the preferred stock, payable September 30 to stockholders of record, September 20.

NEW YORK STOCK EXCHANGE—LIST OF ACTIVE PRICES

Stocks—	Par	Clos. Quot. Sept. 13	Sept. 3	1926 High	1926 Low	1925 High	1925 Low	1924 High	1924 Low
Amerada Corp.	..	30⅝	31	32⅞	21⅜	..	..	..	..
Atlantic Ref., com.	100	112	112½	128⅝	97	117½	95½	140½	78½
Barnsdall "A"	25	27⅜	28⅜	33½	23½	33½	18⅜	29½	14
California Pet., com.	25	32⅜	33¼	38⅜	30⅝	34⅝	23⅞	29	19⅞
Houston Oil	100	60¼	62⅜	72	50¼	85	59	82½	61
Independent Oil & Gas	..	25⅞	25⅛	34	20¼	41⅜	13½	16¼	5¾
Indian Refining	10	9	9⅜	13⅜	9½	14¼	5½	7	3⅜
Lago Oil & Trans.	..	21	22	24½	19¼	..	..	..	..
Louisiana Oil	10	15¾	16¾	19⅝	12	23¾	13¾	..	..
Maracaibo	..	22¾	23½	28⅞	20⅜	35½	20⅜	37¼	25⅜
Marland	..	58½	59¾	63⅝	49¼	60⅛	32⅝	42	29
Mexican Seaboard	..	*11	*11	13¾	6	22½	9	26⅜	14⅛
Mid-Continent Pet.	..	31⅜	32⅝	41	25⅝	38	25¾	40¼	22⅝
National Supply	50	69¾	70¾	71	55½	71	54⅜	72½	54
Oil Well Supply	25	35½	34	36	30	38	33⅜	..	..
Pan. Amer., B.	50	67¼	68½	78⅜	56⅛	83⅞	59½	65	44½
Pan. Amer., Western B.	..	35⅞	37½	46	34	49¾	37¼	..	..
Phillips Pet.	..	50½	52¼	52¾	42½	47⅜	36¼	52¼	28½
Producers & Refiners	50	*13	14¼	17½	11	32⅝	12½	32½	29⅜
Pure Oil, com.	..	27	27⅝	31	25⅜	33¾	25⅛	30¼	20
Royal Dutch, N. Y., sh.	13.40	50⅝	51	57⅜	49⅜	57⅜	48¼	59½	40⅜
Shell Transport	10	*43	*44	48⅜	42	49	39¾	42	33
Shell Union, com.	..	29¼	30½	30⅜	24	28⅜	21⅝	22½	15⅜
Simms Pet.	10	18¼	18⅝	28⅝	16½	28½	17⅜	24	10⅝
Sinclair Consolidated, com.	..	21	21¼	24⅞	19⅜	24⅞	17	17½	15
Skelly Oil	25	34¼	35⅜	37⅛	27	32½	21⅜	29	17⅛
Standard of California	25	61¼	63	63½	54	67¼	51½	68½	55½
Standard of New Jersey, com.	25	43⅜	43¾	46⅜	40¼	47½	38⅜	41½	33
Sun Oil Co.	..	33	32⅜	41⅝	30⅛	43⅞	38⅛	..	..
The Texas Company	25	54¼	56½	58	48	55	42¾	45⅝	37¾
Texas Pacific Coal & Oil	10	15⅛	15⅜	19½	12⅛	23⅜	11	15¼	8¼
Tide Water Oil	25	30¼	30½	39¼	30⅛	..	..	..	..
Transcontinental	..	4¼	4½	5½	3	5⅞	3½	6½	3⅜
Union Oil of California	25	51⅜	53	58	37¼	43⅝	33⅛	39	35½
Union Tank, com.	100	114¾	113	113	84¼	‡134	118	132⅞	94
White Eagle Oil & Refining	..	26¼	26½	29¾	25⅛	31¾	25⅝	29⅛	23⅛
Standard Oils									
Anglo-American Oil	£1	18⅝	17⅜	19⅜	16½	26¾	17½	18⅜	14⅝
Borne Scrymser	100	•290	‡285	295	226	240	205	164	150
Buckeye Pipe Line	50	47¼	46½	59½	47⅝	72	63½	85½	51
Chesebrough Mfg. Co.	25	•73½	73	72¾	63	74	48¼	62½	29¼
Continental	10	20½	21	25⅞	19¼	31⅛	21⅞	..	..
Crescent Pipe Line	25	•15½	•16	16	14½	17½	10	20	11¾
Cumberland Pipe Line	100	•109½	109	137	108	156	128	148	108
Eureka Pipe Line	100	•47	•48	63⅜	47¾	96	61¼	105	74
Galena Signal com.	100	16¾	•19	32½	17⅛	68½	23½	69⅝	62½
Humble Oil & Refining Co.	25	59½	61⅞	68⅛	52	99	42½	43⅜	36
Illinois Pipe Line	100	•134	134	144	131	154½	124	161	123
Imperial Oil, Ltd.	..	36⅝	37	38⅜	32½	39⅛	27¼	119	99
Indiana Pipe Line	50	•58	•58	68	58	84	87½	100	66
International Pet. Co.	10	33½	34⅝	35¼	28⅜	35⅝	22½	34¾	16⅞
National Transit Co.	12.50	14¼	•14¼	20⅜	14½	25½	16½	25⅞	20⅝
New York Transit	100	•33	•34	51½	33¼	79	50	97	54½
Northern Pipe Line	100	70	•72	80½	68	88	67½	107½	72
Ohio Oil Co.	25	60	63¼	67¾	55¾	75¼	60	79½	53
Penn.-Mex. Fuel	25	•18¼	•18¼	24¼	15	44	19	35⅝	27
Prairie Oil & Gas	25	52¾	53⅜	60¼	48	65½	45⅞	269	193
Prairie Pipe Line	100	124¼	125	127	122½	129⅝	105	111	100
Solar Refining Co.	100	•203	•205	212	184½	259	200	240	170
South Penn Oil	25	37⅝	38½	50	35	‡197	139	176	117
Southwest Pa. Line	100	•53	•52	56	47½	84	50	89	68
Southern Pipe Line	50	•24½	•24	74½	61½	103	63	100	80½
Standard of Indiana	25	64	64½	70½	61⅝	70⅝	59½	69⅝	54¼
Standard of Kansas	25	22¼	22	36½	21	46	30¼	50½	32½
Standard of Kentucky	25	124½	•124	134⅝	108	137	114⅝	121⅜	101
Standard of Nebraska	25	•46	•48½	†51⅛	†42	270	231	262	198
Standard of New York	25	32⅜	33¼	47¼	30⅝	48⅝	40	48	37¾
Standard of Ohio, com.	100	•285	308	362	292½	369	338	337½	277
Swan & Finch, com.	25	•17½	17½	21	18	27	12	28	20
Vacuum Oil	25	98½	101	109⅝	94⅛	169½	80⅛	83½	50½
Miscellaneous									
Gulf Oil Corp. of Pa.	25	88½	95	95	82½	98⅛	63½	67⅝	56
Tidewater Associated	..	24½	•24	27	21	..	..	..	..

*Bid, no sales. ‡Old stock. †New stock.

The Oil and Gas Journal's weekly average price of 20 representative petroleum stocks listed on the New York Stock Exchange was as follows:

Sept. 13	59.06	Aug. 9	59.35	July 2	59.38
Sept. 3	60.16	Aug. 2	59.76	June 28	60.17
Aug. 30	59.86	July 26	58.44	June 21	59.91
Aug. 23	59.06	July 19	59.45	June 14	59.40
Aug. 16	59.34	July 12	59.43	June 7	58.92

PRESIDENT FARISH, A. P. I., APPROVES BOARD REPORT

NEW YORK, Sept. 10.—W. S. Farish, president of the American Petroleum Institute, today issued the following statement:

"The report of the Federal Oil Conservation Board will meet with general approval. In its emphasis on co-operation between Federal and State Governments and oil producers, in the development of oil fields, the board avoids the dangers which would be incident to impractical compulsory schemes destructive of individual initiative. The oil industry has long recognized that economies could be effected by rational co-operation under proper safeguards.

"In discussing the directions in which the industry can contribute to assure future supplies, the board takes the very practical view that continued exploration for new fields and new sands is of primary importance. The preservation of the incentive to such exploration is the key to our national security, and all else is secondary. Co-operation in producing the oil after it is found, to be effective must recognize this primary fact. I believe the Conservation Board, the State authorities, and the industry, will through continued study find the proper course to follow.

"I am glad the board will make a further report on the liquid fuel products obtainable from coal, shale and lignite. There is a firm conviction in the minds of many in the petroleum industry that liquid products from these sources will be furnished in almost unlimited quantities. It is my belief that with the help of science the development of improved processes will in the future furnish a stable supply of liquid fuels from these resources. This supply will augment the oil from wells, and will find its way into consumption without upsetting the normal run of the petroleum industry or disturbing the consumer."

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PITFALLS IN OIL BOARD RECOMMENDATION

(Continued from Page 35)

startling that it is bound to cause uneasiness in the industry, and possibly some hasty legislation that will bring a condition whose consequences cannot clearly be foreseen.

"The common right of adjoining owners," says the report, "to reduce to possession respective oil and gas in the pools tapped by wells drilled on their lands, should involve some recognition of correlated obligations, so that in the drawing of oil and gas by one owner from the common reservoir the producer should be required to recognize the right of the neighbor to so much of the oil as is withdrawn from underneath his property, less a reasonable allowance for the cost of production, the hazard of the undertaking, and a reasonable profit on the undertaking. The right of the state under its police powers to prevent the action of one owner from working a deprivation of the rights of other owners of a common property and to prevent waste or destruction of a common property by one of the owners, seems reasonably clear."

The adoption of this recommendation as a principle of right in the producing business would indeed be a departure from established practice. Certainly no legislature or court has ever asserted the obligation of one land owner to account to another for "so much of the oil as is withdrawn from underneath his property," either with or without an allowance "for the cost of production, the hazard of the undertaking, and a reasonable profit on the undertaking."

On April 9, 1900, the Supreme Court of the United States, in Ohio Oil Company vs. Indiana 177 U. S. 190, through Justice White, laid down the principle that oil and gas in place, that is, in the ground in a common reservoir, are not the subject of absolute ownership, as are solid minerals, and the further principle that the state in the exercise of its police power, might prevent the waste of gas in such a way as to destroy a field. But it also laid down the principle very clearly that when oil or gas is reduced to possession, it is the property of the finder, whether the mineral comes from under his land or from that of someone else. In declaring this principle the court said:

"Whilst there is an analogy between animals ferae naturae and the moving deposits of oil and natural gas, there is no identity between them. Thus, the owner of land has the exclusive right on his property to reduce the game there found to possession, just as the owner of the soil has the exclusive right to reduce to possession the deposits of natural gas and oil found beneath the surface of his land. The owner of the soil cannot follow game when it passes from his property; so also the owner may not follow the natural gas when it shifts from beneath his own to the property of someone else within the gas field. It being true as to both animals ferae naturae and gas and oil, therefore, that while the right to appropriate and become the owner exists, proprietorship does not take being until the particular subjects of the right become property by being reduced to actual possession. The identity, however, is for many reasons wanting. In things farae naturae all are endowed with the power of seeking to reduce a portion of the public property to the domain of private ownership by reducing them to possession. In the case of natural gas and oil no such right exists in the public. It is vested only in the owners of the fee to the surface of the earth within the area of the gas field."

Wild Game Analogy

The limited analogy between wild game and oil and gas has become classic in the annals of oil and gas law. It has been used over and over again to illustrate the principle that when oil or gas has passed from beneath the surface of one tract of land, the owner of that tract has lost his conditional title, or rather his right to reduce them to possession; just as one may not pursue game into the private property of another, nor demand a portion of the game which has come upon another's land. But the courts have also, following Justice White, pointed out that while the state might prohibit the taking of game altogether, it could exercise no such right as to oil and gas.

So strongly has the principle of ownership of oil and gas when reduced to possession become fixed in the law that a suggestion that one landowner should be compelled to account to another landowner for the oil which may come from that other's land, strikes any one familiar with the law and practice of the oil business as revolutionary and communistic. So far as the writer is aware, this is the first time that the principle has even been suggested. The statement of the board that "the producer should be required to recognize the right of the neighbor to so much of the oil as is withdrawn from underneath his property," is incomprehensible to one familiar with oil producing practice, or oil and gas law. The law relating to the mining of solid minerals may carry such an obligation, but the law governing the production of oil and gas surely does not and never has. In the Ohio Oil Co. case, Justice White quoted from the prior case of Brown vs. Spilman, 155 U. S. 655: "Petroleum gas and oil are substances of a peculiar character, and decisions in ordinary cases of mining for coal and other minerals which have a fixed situs, cannot be applied to contracts concerning them without some qualifications. They belong to the owner of the land and are a part of it, so long as they are on it or in it, or subject to his control, but when they escape and go into other land, or come under another's control, the title of the former owner is gone. If an adjoining owner drills his own land, and taps a deposit of oil or gas, extending under his neighbor's field, so that it comes into his well, it becomes his property."

Right of State

The right of the state to prevent waste, or the destruction of the oil or gas field, is quite another thing than the recognition of the right of one land owner to a share of the oil or gas taken out through the wells on another's land. What is waste may be determined by law, and it may be enjoyed. And the power to define, being in the legislature, the courts will not inquire into the wisdom of the definition. But to attempt to say that the taking of oil from under another's land, in the usual and ordinary course of development, would constitute waste, would, in view of the settled law of the industry, and the rules of property that have grown up in the oil producing states in the 25 years that have elapsed since the decision in Ohio Oil Co. vs. Indiana, be a taking of property without due process of law. For the courts have all unanimously declared that the property rights of the finder vest when the oil is reduced to possession, whether it comes from his own or from other land. Legislation attempting to provide for a division of oil produced would certainly be resisted by the industry as a whole, and any attempt to pass such legislation, if it received support from the Oil Conservation Board, might create an unfortunate condition that would throw suspicion on the idea of co-operation. Co-operation will not be fostered by an attempt to compel one to give up what is plainly one's own property.

Revolutionary and Communistic

This recommendation of the Oil Conservation Board is quite serious, and should receive further consideration from it, so that the state Legislatures, and the administrative boards under whose control the production of oil may fall, shall not receive a wrong idea of what the board intends. The board cannot mean to support so revolutionary and communistic an idea of oil and gas rights.

Undoubtedly, upon reconsideration, the board will either explain what is meant by this statement or eliminate it. It cannot be disregarded, for the importance with which the board regards its suggestion is seen from the introductory sentence: "Of the fundamental conservation measures above mentioned, that of co-operative methods in development of new fields to prevent temporary gluts, merits more exhaustive discussion, as it is a promising field for important action by both the industry and the Government."

Then follows the statement that "the common right of adjoining owners to reduce to possession respective oil and gas in the pools tapped by wells drilled on their lands should involve some recognition of the correlated obligations so that in the drawing of oil and gas by one owner from the common reservoir the producer should be required to recognize the right of his neighbor to so much of the oil as is withdrawn from underneath his property * * *"

Certainly, if the co-operative theory is based upon any such premise, we may expect instant failure. The drilling of wells by joint agreement may be worked out, but no such recognition of the right of an adjoining land owner, for such right has never even been asserted, much less recognized. It is a well-known fact that an offset to a producing well may be dry, not because the oil is drained from the adjoining land, but because the sand runs out, or because of subsurface conditions not apparent except to the drill. And the land owner or lessee who risks his money in a test well will never consent to share the fruits of his venture except with those entitled to a share by agreement with him. The Roland well at Bristow was one of the greatest gushers in the history of the Mid-Continent Field. The Carter Oil Co. drilled a well just 160 feet distant, closer than the customary offset, and it was dry. It was never even suggested that the Roland Oil Co. account to the Carter Oil Co. or to the oil company's landowner for any part of the oil produced from that well.

Not Workable

The principle may be worked out and put in force in the operation of oil fields by the use of air pressure and water flooding. But these matters will have to be determined by agreements covering an entire field, in which an arbitrary distribution of the oil produced may be provided for, based on the thickness and porosity of the sand, and the primary yield of the various wells. But the principle of community ownership of the oil and gas in place "in development of new fields, to prevent temporary gluts," is not workable, to say the least.

"The right of the state," proceeds the report, "to prevent the waste of natural resources is rendered more important in this matter by the newly discovered, or at least more widely recognized facts regarding the role of gas in the oil sands. Gas is more than a commodity of smaller commercial value associated with oil; it is the efficient agent provided by nature for bringing the oil within the reach of man. Dissolved in the oil, the gas makes the oil flow more freely in the well and there forces it upward and the longer the gas is retained in solution, the larger is the recovery of oil * * * The authority of the state to prevent the waste of natural gas has already been declared and it logically applies as well to the dissipation of gas pressure without which great quantities of oil would be entirely wasted. Geologic science and engineering practice as well as economic considerations of waste afford a broad foundation on which to base state legislation."

Difficulties in Practice

This recommendation of the board at first reading appears fair and sound; but upon consideration difficulties present themselves. To an oil producer, the recommendation would imply a suggestion of legislation that would prevent him from opening up his well wide, and securing all the initial flow, for undoubtedly in the first days, when the production of a gusher is highest, there is some waste of gas. It may be suggested that the conservation intended is that the gas produced from an oil well should be forced down into the oil sand again, and thus the solution of the gas in the oil preserved. But this can only be done after the flowing is over, and the well is put on the pump. And besides, in many localities, the gas from an oil well is used to produce natural gasoline, although in that case some of the dry gas resulting may be forced into the well. Certainly the suggestion of a program of state legislation by the board on this subject should carry with it a more detailed statement of its meaning, otherwise disastrous laws may be hurriedly passed. It is hoped that the point may be clarified in the subsequent reports.

How Government May Aid

The board suggests two ways in which the Federal Government may be of assistance in working out the problems of the oil industry:

1. Expanded research by the Geological Survey, the Bureau of Mines and the Bureau of Standards.

2. More intelligent handling of Government controlled oil sources on public and Indian lands.

The help of the Government in these ways would be tremendous. But it is suggested that another aid may be given. This report is most impressive because it suggests that the Government will look with a friendly eye on a co-operative rather than on a competitive program. But it suggests state legislation. The states are sovereign, and the ideas of their legislators sometimes diverse. Frequently they are hostile to the suggestion of big business. The Oil Conservation Board has approached the problem in a large way, and if men of the vision and caliber of the Secretary of the Interior, the Secretary of the Navy, the Secretary of Commerce, and the Secretary of War were assured in all the state Legislatures, the work of the industry in formulating and securing the passage of necessary legislation would not be difficult.

As showing the broad spirit of the officials who present the report, may be instanced their recommendation that:

"In order to accomplish something in relieving the pressure of competition before it is too late, it is suggested that the lawyers familiar with the business of the oil operators take the lead in developing the needed line of action in accord with the discoveries of science and changes in engineering practice."

That obviously is the sensible course for the industry to take. But it presents difficulties which should be considered before the legislation is formulated. It is well known that some legislatures are extremely suspicious of reforms in laws presented by the lawyers for the large corporations, and it is the lawyers for the larger corporations to whom the board obviously refers. For the legal minds that will formulate the legislation must be those familiar with corporate and financial practice.

But the Government can render a far greater aid than the two points suggested by the board; the assistance of its technical bureaus, and the revision of its leasing regulations for Indian and public lands, and that is by giving its aid in working out a legislative program, and giving its formal approval to such program when it shall have been developed by the industry.

A legislative program could be mapped out covering (1) the corporate and financial organizations that might be necessary for co-operative effort; (2) regulations for the operation of producing properties, based on a new and scientific definition of what is waste; (3) permission for joint associations or pools, trusts, in fact, for scientific study and the evolving of new methods of production and refining; (4) price agreements for the stabilizing of the industry; (5) joint holding companies for the operation of fields as units instead of isolated leases. Other items will present themselves as the work progresses.

The laws so drafted should be submitted to the Conservation Board, and by it to the various technical bureaus and to the legal department of the Government. After being approved by them, it should be submitted to a conference of attorneys general of the oil producing states. And then, after approval, or at least consideration by these various de-

partments, submitted to the legislatures of the various states for enactment.

Need for Amendment

For the report of the Oil Conservation Board, if carried out, involves more than the working out of operating agreements between producers of oil; it involves the reconstitution of a basic industry on co-operative instead of competitive principles. For that reason, though a practical oil operator may find much to criticise and to disagree with in the recommendations, it represents in reality as great a stride forward as American industry records. Indeed, if in the production, the refining and the marketing of oil, the industry with the aid of the Government makes any appreciable progress along the lines laid out, it will not only benefit itself, but begin a sounder foundation for continuing prosperity for the nation.

To expect what is in effect a revolutionary economic suggestion to be carried out without opposition both from various units of the industry, and from state Governments, is to expect far too much. Harsh criticism of the basic principle of the board's recommendation may be expected from those who disagree, either sincerely, or from a desire to gain popular acclaim. And this criticism will be loud and insistent. That such a preliminary pronouncement should be without vulnerable points is impossible, and the industry should be frank, and seek by agreement with the board to eliminate the points of disagreement.

TEXAS PANHANDLE

(Continued from Page 45)

flowed 100 bbls. from lime and granite wash at 3,072-78 feet. Marland Oil Co.'s No. 2 Burnett-A, Section 116, Block 5, was temporarily abandoned at 3,191 feet, after plugging back from 3,205 feet. Roxana Petroleum Corp.'s No. 1 E. F. Ryan, in Section 92, Block 4, was spraying 10 bbls. from pay at 3,080-3,149 feet. Sunny Jim Oil Co. abandoned the location for their No. 3 Burnett, in Section 114, Block 5, SE cor. The Texas Company's No. 9 Burnett, Section 127, Block 5, junked the hole at 2,960 feet and is skidding the rig.

Gray County

Bayshore Petroleum Co.'s No. 1 Bradford, in Section 148, Block B-2, H. & G. N. Survey, was trying to shut off 165,000,000 feet of gas with water so as to cement casing. Total depth is 2,666 feet. Magnolia Petroleum Co.'s No. 1 Merten was shot with 20 quarts at 2,985-3,005 feet, total depth 3,055 feet, and was making 4 bbls. of oil an hour. This well is in the SE. cor. of Section 82, Block 3, almost exactly half way between the Shamrock Petroleum Co.'s No. 1 Merten and the Wilcox-Pampa Oil Co.'s No. 3 Worley & Reynolds, the big well of the pool. Wilcox-Pampa Oil Co.'s No. 6 Worley & Reynolds, in Section 62, Block 3, was flowing 20 bbls. an hour from granite wash at 2,938-55 feet. It will probably be deepened.

Wheeler County

Scott & Barner's No. 1 J. H. Jackson was completed for 20,000,000 feet of gas at 2,145-50 feet, total depth 2,240 feet. Upham Gas Co.'s No. 1 Newton was also completed for 8,000,000 feet of gas at 1,860-1,980 feet, total depth. Top of lime was 1,350 feet.

DAILY AVERAGE PRODUCTION OF AMARILLO DISTRICT WEEK ENDING SEPTEMBER 11, 1926

Hutchinson County

Company	Wells	Dly. Av.
Amerada Pet. Corp. J. A. Whittenberg	1	65
Amerada Pet. Corp. J. A. Whittenberg-B	4	550
Amerada Pet. Corp. G. A. Whittenberg	2	70
American Refining Co.	2	125
Apex Oil Co.	2	290
Badger Oil Co.	1	70
R. O. Barnum	1	70
Canadian River Oil Co.	4	415
Canyon Oil & Gas Co.	2	1,600
Center Dome Oil Co.	1	0
Centerfield Oil Co.	1	0
Cobb-Whittenberg	2	280
Currie Bros. & Phillips	1	570
Cockrell-McIlroy	2	860
Delmar Oil Co.	1	50
Derby Oil Co.	3	375
Devonian Oil Co.	3	900
Dixon Creek Oil Co.	21	7,950
Double 5 Oil Co.	1	65
Douglas Oil Co. & Cline	1	15
Dunnigan et al.	3	1,305
Echo Oil Co.	3	680
Empire Gas & Fuel Co.	4	650
Fly-Blackburn Oil Co.	2	250
Gates Oil Co.	4	380
Goldcline Oil Co.	1	100
Golding & Phillips	1	0
Gulf Prod. Co., Panhandle & Cline	36	6,500
Gulf Production Co.	16	4,050
Heywood et al.	2	105
J. K. Hughes Development Co.	11	1,850
Holmes, Currie & McKnight	2	490
W. H. Holmes	1	240
Hutchinson Co. Oil Co.	1	0
Dan A. Japhet	1	475
L. H. Lennix	1	0
Lennix & Patterson	1	375
Lucky 10 Oil Co.	1	455
Marland Oil Co.	26	16,550
Midwest Exploration Co.	1	600
McMan Oil & Gas Co.	12	8,200
McIlroy & Herring	4	600
S. D. and W. W. McIlroy	3	715
McIlroy Bros. et al.	3	390
J. H. Middleton	3	85
Murchison & Fain	1	350
Newby Oil Co.	1	50
New Domain Oil Co.	3	70
Phillips & Heywood	1	650
J. R. Phillips	1	25
Phillips Petroleum Co.	52	20,990
Prairie Oil & Gas Co.	16	3,194
Relief Oil Co.	2	590
Riley & Holmes	1	175
Roxana Petroleum Corp.	8	1,750
Ryan Petroleum Corp.	3	390
Shamrock Petroleum Co. (now carried under Prairie)		
Skelly Oil Co.	12	7,200
Sklatex Oil Co.	4	1,410
J. L. Smith	2	75
Smith & Bynum	2	160
Spring Creek Oil Co.	3	1,050
Summitt Oil Co.	2	365
Sunny Jim Oil Co.	5	700
Sunburst Oil Co.	2	2,100
Texhoma Oil & Refining Co.	1	10
Travelers Oil Co.	2	760
Triangle Oil Co.	2	2,750
J. D. Ward (Shell)	1	70
J. D. Ward, et al.	1	55
Westex Oil Co.	7	2,800
White Eagle Oil & Refining Co.	12	1,950
J. O. Whittington	1	0
Total Hutchinson County	347	169,569
Average per well		315

Carson County

Amarillo Oil Co.	1	30
American Refining Co.	5	490
Gates Oil Corp.	1	10
Gulf Production Co.	13	385
Marland Oil Co.	12	2,460
W. W. Silk et al.	2	75
Skelly Oil Co.	2	100
Sunny Jim Oil Co.	2	45
The Texas Company	11	245
Total Carson County	49	3,780
Average per well		77

Gray County

Empire Gas & Fuel Co.	1	10
Prairie O. & G. Co. (was Shamrock)	3	1,220
Wilcox-Pampa Oil Co.	5	2,480
The Texas Company	1	5
Total Gray County	10	3,715
Average per well		371

Potter County

Amarillo Oil Co.	1	35

Wheeler County

Gibson Oil Corp.	2	165
Midwest Exploration Co.	3	15
Texhoma O. & R. Co. (Continental)	2	450
Total Wheeler County	7	630
Average per well		90
Grand total Panhandle	414	117,729
Average per well		284
Total Panhandle 4 weeks ago	333	105,820
Average per well 4 weeks ago		318

NORTH CENTRAL TEXAS

(Continued from Page 46)

No. 2 Bond made 75 bbls. at 1,385-99 feet. Flannigan and others' No. 1 Miller was dry and abandoned at 1,900 feet. Prairie Oil & Gas Co.'s No. 11 McDonough made 10 bbls. at 1,411-26 feet.

Coleman County

Midwest Exploration Co.'s No. 1 Morris was completed for 22,500,000 feet of gas at 2,243-70 feet. National Oil & Refining Co.'s No. 2 Harris was dry and plugged at 2,513 feet. Schermerhorn Oil Co. and others' No. 1 Gray had a show at 1,638-40 feet and was drilling ahead at 1,830 feet. McKenzie and others' No. 1 Pitty was dry and abandoned at 775 feet.

Cooke County

Hooser Oil Co.'s No. 3 Dennis had oil sand at 1,244-77 feet. When the plug was drilled out it filled up 800 feet in 12 hours. C. C. Lanier's No. 2 Hyman had broken sand and shale at 1,222-50 feet, estimated good for 8 bbls. It was deepened, getting lime at 1,250-53 feet, and more broken oil sand and shale at 1,253-67 feet, estimated good for 60 bbls.; No. 3 Hyman was estimated an 80 bbl. well in oil sand at 1,158-63 and broken sand and shale at 1,163-87 feet.

Eastland County

Corzelius Brothers' No. 1 Norris had 300,000 feet of gas at 1,070-73 feet, but was still drilling at 1,130 feet. Eastland Oil Co.'s No. 3 Wright made 10 bbls. of oil and 4 bbls. of water at 1,576-99 feet. Greene Production Co.'s No. 1 Richmond was dry and abandoned at 2,825 feet. Magnolia Petroleum Co.'s No. B-1 Ford was also a failure at 3,356 feet; No. 1 Thurman had a show of oil 2,840-48 feet and was drilling at 2,860 feet. Parton & Myers' No. 1 Fox had a hole full of water at 1,518-22 feet and was shut down for orders. Hickok Producing & Development Co.'s No. 1 Owen and others was dry and plugged at 3,420 feet. Navarro Oil Co.'s No. 1 Clark had 750,000 feet of gas in the second sand at 1,286-1,324 feet.

Foard County

Humble Oil & Refining Co. and Navarro Oil Co.'s No. 1 Easley was completed for 8,000,000 feet of wet gas, 1,200 pounds rock pressure, at 3,761-3,809 feet, total depth 3,851 feet.

Hardeman County

Wolf and others' No. 1 Norton was dry and abandoned at 1,602 feet.

Hood County

Parsons and others' No. 1 Cook was dry and plugged at 4,048 feet.

Jack County

Seaboard Oil Co.'s No. 2 Cullers swabbed 125 bbls. of oil in 24 hours at 2,084-92 feet.

Montague County

Arco Oil Co.'s No. 2 Howard and others was abandoned at 1,751 feet. Gracey & Kahle's No. 2 Maddox made 85 bbls. at 882-95 feet. Humble Oil & Refining Co.'s No. 6 Maddox pumped 70 bbls. at 865-86 feet. McMan Oil & Gas Co.'s No. 1 Howard and others pumped 35 bbls. at 1,363-71 feet. Olean Oil Co.'s No. 5 Maddox made 60 bbls. at 848-68 feet. Pure Oil Co.'s No. 1 Rowland and others-B pumped 85 bbls. in the first 18 hours at 1,068-83 feet. E. L. Smith Oil Co.'s No. 4 Maddox made 30 bbls. at 883-906 feet. The Texas Company's No. 20 Gist-A pumped 40 bbls. at 886-907 feet; No. 21 pumped 60 bbls. at 894-908 feet; No. 23 was dry and abandoned at 1,115 feet; No. 3 Martin had oil sand at 1,136-42 and 1,168-72 feet, making 25 bbls. of oil and 15 bbls. of salt water; No. 16 Oldham was good for 80 bbls. at 1,060-83, 1,088-94 and 1,102-86 feet, total depth 1,110 feet; No. 17 Oldham pumped 55 bbls. from sands at 1,057-59, 1,067-78 and sandy lime at 1,101-03 feet, total depth 1,115 feet. Texhoma Oil & Refining Co.'s No. 3 Bouldin-A made 137½ bbls. at 1,129-36 and 1,152-59 feet; No. 11 Howard and others made 48 bbls. at 1,327-39 feet, with broken sand and shale at 1,360-64 feet; No. 2 Maddox-A swabbed 65 bbls. at 871-97 feet and was preparing to pump; No. 5 Rowland was a 15-bbl. pumper at 1,073-76, 1,099-1,105, 1,130-43 and broken sand at 1,143-79 feet; No. 7 made 72 bbls. at 1,145-69, total depth 1,170 feet. Texhoma Oil & Refining Co. and Republic Production Co.'s No. 5 Rowland pumped 40 bbls. at 1,107-10, 1,128-44 and 1,148-56 feet. Walker and others' No. 1 Howard and others was estimated good for 70 bbls. from sand at 1,120-23, broken sand 1,123-57 and solid sand 1,157-59 feet.

Burton McKee Oil Corp.'s No. 1-A Strawn Coal Co. pumped 25 bbls. at 3,070-80 feet, total depth 3,280 feet, plugged back to 3,089 feet. Dalton's No. 1 Edgin was shot with 18 quarts at 1,409-18 feet, total depth 1,422 feet, and made 5 bbls.

Throckmorton County

Humble Oil & Refining Co.'s No. 1 Overcash had 8,000,000 feet of gas at 812 feet and was shut down; No. 1 Harris found sand at 3,925-65 feet dry and was drilling ahead. Red Bank Oil Co.'s No. 1 Parrott had a small show of oil in lime at 3,944-4,025 feet and was fishing tools. Reiter-Foster Oil Corp.'s No. 1 Elliott swabbed 138 bbls. in 24 hours and flowed 120 bbls. in the next 24 hours from lime pay at 3,943-74 feet and was completed. Same company's No. 2 Parrott had dry sand at 3,944-4,001 feet and was shut down; No. 3 V. A. Parrott flowed 50 bbls. at 3,930-66 feet and was completed.

Adams and others' No. 1 McKeichen made 6 bbls. of oil and 6 bbls. of salt water after plugging back from 1,003 feet to sand at 886½-88 feet.

French & Lewis' No. 2 Newell was dry and abandoned at 1,657 feet. Magnolia Petroleum Co.'s No. 6 Terry pumped 60 bbls. at 2,215-17 feet. Moore's No. 1 Nail had 500,000 feet of gas in sand at 725-40 feet and was drilling ahead at 845 feet.

Roeser & Pendleton and Marland Oil Co.'s No. 21 Cook A-84 flowed 200 bbls. at 1,350-55 feet; No. 14 Cook's A-85 made 86 bbls. at 1,305-18 feet; Roeser & Pendleton's No. 1 Cook B-60 flowed 80 bbls. at 1,190-1,201 feet.

Stephens County

Humble Oil & Refining Co.'s No. 1 Richardson swabbed 30 bbls. of oil at 3,685-3,801 feet and was preparing to drill deeper. Texas Fidelity Oil Corp.'s No. 1 Pratt made 30,000,000 feet of gas and 288 bbls. of oil at 1,906-90 feet.

Wichita County

Perkins, Cullum & Stump's No. 4 Chilson was dry and abandoned at 1,250 feet; No. 5 was also a duster at 1,200 feet. Simms Oil Co.'s No. 1 Chilson had 400 feet of oil in the hole at 1,150-53 feet; No. 6 Dutton made 35 bbls. from sand at 1,156-73 feet after plugging back to 1,171½ feet. Bridwell & Heydrick's No. 6 Ward & Todd was dry and abandoned at 1,957 feet. Roy I. Carter's No. 1 Burnett pumped 3 bbls. at 830-37 feet; No. 4 Ramming pumped 15 bbls. at 1,565-93 feet; No. 5 was junked and abandoned at 1,305 feet; so was No. 6 at 1,630 feet; No. 7 pumped 10 bbls. at 1,570-90 feet.

Clark and others' No. 7 Ward & Todd was flowing 300 bbls. at 1,880-92 feet. Clark, Waggoner & Hammond's No. 2 Ward & Todd was dry and abandoned at 1,905 feet. L. P. Hammond's No. 1 Ward & Todd pumped 25 bbls. at 1,850-62 feet, total depth 1,895 feet. Hereford Oil Co.'s No. 3 Allingham-A was dry and plugged at 1,962 feet. John O'Neill's No. 1 Harrison was a failure at 2,022 feet. Pigg & Murchison's No. 1 Warner was also dry at 2,570 feet. Ryan Petroleum Co.'s No. 80 Nance pumped 12 bbls. at 1,302-38 feet; No. 81 pumped 5 bbls. at 1,309-58 feet; No. 82 pumped 35 bbls. at 501-18 feet. Skelly Oil Co.'s No. 12 Ramming pumped 16 bbls. from broken sand at 1,538-70 feet and solid sand at 1,610-22 feet, total depth 1,649 feet. Stidham & Thrasher's No. 1 Ward & Todd flowed approximately 400 bbls. from sand at 1,855-66 feet. The Texas Company's No. 309 Waggoner pumped 115 bbls. at 1,733-40 feet.

Wilbarger County

Barkley & Meadows' No. 14 Stephens-A topped granite at 2,970 feet and was drilling in granite at 2,984 feet. Humble Oil & Refining Co.'s No. 50 Stephens pumped 65 bbls. from sands at 1,294-1,342 and 1,398-1,420 feet; No. 15 Waggoner-H swabbed 105 bbls. in 18 hours at 2,389-94 feet, total depth 2,396 feet; No. 9 Waggoner K pumped 100 bbls. at 1,867-85 feet; No. 13 Waggoner-M pumped 60 bbls. at 2,358-69 feet; No. 2 Waggoner-P swabbed 124 bbls. in 18 hours at 2,366-89 feet, total depth 2,430 feet.

Milham Corp.'s No. 5 WaggonerB pumped 45 bbls. at 2,550-62 feet. Murchison & Fain's No. 1 Fluhman was junked and abandoned at 715 feet. The rig was skidded 40 feet east and a new hole spudded.

Phillips Petroleum Co.'s No. 1 Waggoner-C swabbed 175 bbls. in 18 hours at 2,345-49 feet and 2,351-60 feet; No. 3 Waggoner-L pumped 10 bbls. at 1,878-80 feet; No. 5 Waggoner-L was junked at 2,255 feet and the rig skidded 35 feet east. The new hole was down 325 feet; No. 4 Waggoner-O swabbed 180 bbls. at 2,300-04 feet, lime, and sand at 2,329-43 feet; No. 2 Waggoner-A swabbed 80 bbls. from lime at 2,294-98 feet and sand at 2,329-41 feet; No. 9 Waggoner-NN swabbed 128 bbls. from sand at 2,303-17 feet and lime 2,269-72 feet; No. 1 Waggoner-AAA was dry and abandoned at 3,504 feet.

Rio Bravo Oil Co.'s No. fee, Section 19, was dry and abandoned at 2,540 feet. Three other failures were H. E. Rondeau's No. 1 Waggoner-C at 2,210 feet; Roxana Petroleum Corp.'s No. 1 Coleman, at 1,100 feet; and The Texas Company's No. 306 Waggoner, at 2,640 feet.

Waggoner Refining Co.'s No. 1 Waggoner D was shot with 10 quarts at 1,940-56 feet and estimated good for 15 bbls.

Young County

Atlantic Oil Producing Co.'s No. 9 Rachuig-B swabbed 250 bbls. at 1,148-58 feet. Bridwell & Mayfield's No. 2 Williams-A made 15 bbls. at 665-73 feet. Chenault & Lea's No. 7 Rachuig made 60 bbls. at 1,158-66 feet. Collier's No. 4 fee pumped 30 bbls. at 559-82 feet. Minnich and others' No. 1 Williams was dry and abandoned at 1,010 feet. Pandem Oil Corp.'s No. 6 Whitehead pumped 30 bbls. of oil and 15 bbls. of salt water at 870-72 feet. Panhandie Oil & Refining Co.'s No. 1 Prideaux made 40 bbls. at 715 30 feet. Reed and others' No. 6 Jack made 15 bbls. at 542-60 feet. Robert Oil Co.'s No. 13 Rogers pumped 40 bbls. at 859-67 feet; No. 14 Rogers pumped 50 bbls. at 861-69 feet; No. 1 Spencer was dry and abandoned at 900 feet. Tidal Oil Co. and others' No. 9 Benson-A made 15 bbls. at 882-919 feet; No. 10 made 10 bbls. at 920-40 feet. Wo-Mac Oil Co.'s No. 5 Stewart made 25 bbls. at 770-98 feet. Wirtz and others' No. 1 Huber was an abandoned location.

Nance & Lucas' No. 1 Boozer swabbed 22 bbls. at 1,922 51 feet. Pitzer & West's No. 4 Burgess had a hole full of water at 2,192-2,220 feet and was plugged.

WEST TEXAS WILDCATS

Andrews County

Amon G. Carter and Henry Zweifel's No. 1 Cowden, moving in rig. Henry Zweifel and others' No. 1 Means, location. Maer & Staniforth's No. 1 W. S. Taylor, location.

Brewster County

John Rosenborough & Skinner's No. 1 Skinner, fishing casing at 1,055 feet.

Coke County

Lipan Oil Co.'s No. 1 E. C. Rawlings, shut down at 2,640 feet.

Concho County

The Exploration Co.'s No. 1 Hartgrove, shut down at 452 feet. Kemper Kimberlin and others' No. 1 Schultz, cleaning out at 1,520 feet. Culbertson Brothers' No. 1 W. S. See, underreaming 785 feet. Gene Mayes and others' No. 1 Hartgrove, drilling at 766 feet.

Crane County

Cranfill Brothers Oil Co.'s No. 1 P. J. Lea, drilling at 2,820 feet. Duffey Brothers and others' No. 1 Cowden Brothers, rig. Duffy Brothers and others' No. 1 Griffith. Gulf Production Co.'s No. 1 State-Lasseter, fishing string of tools at 535 feet, got out jars and bit; No. 1 Crier-McIlroy, top of lime at 2,-657 feet, running 6-inch, total depth 2,-667 feet; No. 2 Crier-McIlroy, shut down; No. 3 shut down at 2,691 feet; No. 4, location; No. 2 J. T. McIlroy, fishing for string of tools at 2,165 feet. Humble Oil & Refining Co.'s No. 1 J. T. McIlroy, drilling at 2,775 feet. Independent Oil & Gas Co.'s No. 1 E. S. Hughes, drilling at 430 feet. Magnolia Petroleum Co. and others' No. 2 University Church, drilling at 2,810 feet. Magnolia Petroleum Co.'s No. 1 O'Keefe (University), 100 bbls. at 2,982-3,051 feet. Marland Oil Co.'s No. 1 Hughes-Gibbs, running 6-inch at 2,226 feet; No. 2-C E. S. Hughes, top of salt 653 feet, drilling at 1,200 feet; No. 1-D E. S. Hughes, running 8-inch at 1,625 feet. The Texas Company's No. 1-F Union Land Co., swabs 20 bbls. oil and 30 bbls. water at 3,014-16 feet, trying to exhaust bottom water; No. 2 H. M. King, swabbing 100 bbls. at 2,301-55 feet, to shoot. Tidal Oil Co.'s No. 1 University, flowed 140 bbls. September 8, 90 bbls. September 9, no water, at 3,018-50 feet. The Texas Development Co.'s No. 1 Cowden.

Crockett County

The California Co.'s No. 2 University, pushed back from 2,728 feet to 2,690 feet and shot 110 quarts at 2,646-90 feet, no results, and was shut down. Cranfill Brothers Oil Co.'s No. 1 Harris, location. Cumberland Oil & Gas Co.'s No. 1 Couch, shut down at 1,693 feet. Gulf Production Co.'s No. 1 L. P. Powell-D, drilling 620 feet and 150 feet of water in hole. Humble Oil & Refining Co.'s No. 8 Powell, 2,667-79 feet of oil in hole P to P; No. 10 Powell, 2,673-85 feet, 1,400 feet of oil in hole, P to P; No. 1-B Powell, moving in tools. J. K. Hughes' No. 2-A Powell, total depth 350 feet, skidding rig; No. 3-A Powell, top of salt at 1,160 feet, drilling at 1,300 feet; No. 2-B Powell, drilling at 535 feet. Magnolia Petroleum Co.'s No. 2 Shannon, location. Marland Oil Co. and Wallace's No. 1 J. S. Pierce, location. Republic Production Co.'s No. 1 L. P. Powell, drilling at 810 feet. William Schaffer and others' No. 1 University, shut down at 2,191 feet. Ben Simon and others' No. 1 Shannon, drilling at 2,520 feet; 1,000,000 feet of gas at 2,378-2,400 feet, sulphur water at 2,518 feet. J. D. Young and Carl Cromwell's No. 1 R. Massie, running 5-inch at 2,110 feet with packer; show of oil at 2,109 feet; No. 1 Shannon, rigging up. F. P. Zoch & Marland Oil Co.'s No. 1 University, shut down at 2,005 feet. H. F. Wilcox Oil & Gas Co.'s No. 1 University, drilling at 2,630 feet.

Culberson County

Big Lake Oil Co. and others' No. 1 C. L. Cass, spudded. James H. Gardner and others' No. 1 Radford, material on ground.

Ector County

J. S. Cosden, Henry Zweifel and others' No. 1 Johnson, plugging at 3,603 feet. J. S. Cosden and others' No. 1-A G. W. Connell, drilling at 2,770 feet; No. 1-B W. E. Connell, drilling at 3,670 feet. The Exploration company's No. 1 Kloh & Rumsey, drilling at 3,400 feet; No. 1 J. D. Slator, location. Llano Oil Co. and others' No. 1 E. P. Cowden, drilling at 1,700 feet. Simms Oil Co.'s No. 1 W. P. Edwards, drilling at 2,700 feet. F. E. Skinner and Eastland Oil Co.'s No. 1 J. W. Buchanan, flowing salt water at 3,-509-23 feet, shut down for orders. Leigh Taliaferro and others' No. 1 Henderson, shut down at 1,138 feet.

Fisher County

Ideal Oil Co.'s No. 1 W. F. Martin, fishing for tools at 3,070 feet.

Gaines County

Hucony Oil Co.'s No. 1 Lindsey, top of salt at 2,265 feet, drilling at 3,225 feet.

Garza County

Deep Rock Oil Co.'s No. 1 S. M. Swanson, drilling at 3,125 feet. Emerald Oil Co.'s No. 1-A Connell, shut down at 3,900 feet; No. 1 J. M. Brown, shut down at 2,600 feet.

Glasscock County

Marland Oil Co.'s No. 1 Nellie Calder, shut down for 8-inch, at 2,075 feet. Plateau Oil Co.'s No. 1 L. S. Bell, drilling at 200 feet.

Howard County

Joe Edgar and others' No. 1 Roberts, drilling at 1,765 feet, 1,720-40 feet. Lockhart & Co.'s No. 1 Dora Roberts, 650 feet, cleaning out; No. 1 W. T. Scott, skidding rig, 8-inch at 1,561 feet; No. 1-A Otis Chalk, drilling at 800 feet. Magnolia Petroleum Co.'s No. 1 Mary Chalk, underreaming at 610 feet; No. 2 Otis Chalk, drilling at 1,460 feet; No. 3 Otis Chalk, rigging up machine. Marland Oil Co.'s No. 2 Otis Chalk, shot 40 quarts at 1,625-37 feet. Owen & Sloan's No. 3 Otis Chalk, drilling at 1,220 feet. Reeves, Apperman and others' No. 1 H. R. Clay, shut down at 800 feet. Herbert Oil Co.'s No. 1 T. M. Wingo, skidding rig, 6-inch at 3,012 feet. Humble Oil & Refining Co.'s No. 1 W. W. McCutcheon, drilling at 2,800 feet. J. K. Hughes Development Co.'s No. 1 J. Z. Means, drilling at 320 feet.

Jones County

Gibson & Johnson's No. 1 Wright, building rig. Gillette & Hickey's No. 1 S. W. King, drilling at 1,270 feet. Phillips Petroleum Co.'s No. 1 Joe Winters, first show at 2,493 feet, show at 2,508 feet, at 2,510 feet filled up and flowed approximately 100 bbls., 38 bbls. of oil. Leigh & Taliaferro's No. 1 King, drilling at 1,125 feet. Muse-Robertson's No. 1 William Bristow, shut down at 500 feet. Marland Oil Co.'s No. 1 S. R. Cox, drilling at 1,520 feet. J. C. Yancey and others' No. 1 Rowell, spudded and shut down; No. 1 Herndon, spudded and shut down.

Kent County

The Texas Company's No. 1 Barron, drilling at 4,320 feet.

Kimble County

Dixie Oil Co.'s No. 1 Harrison, spudding at 250 feet.

Loving County

Lockhart & Co.'s No. 1 E. L. Allen, drilling at 2,600 feet.

Lynn County

The Hart Oil Corp.'s No. 1 C. O. Edwards, drilling at 945 feet.

Menard County

J. R. Lewis and others' No. 1 White, spudding.

Midland County

M. Agress and others' No. 1 Jones, shut down at 2,115 feet. Rook & Zimmerman's No. 1 Hill, shut down at 3,-715 feet.

Mitchell County

Teas & Stivers' No. 1 Hardee, fishing casing at 485 feet. California Co.'s No. 1 J. J. Handley, drilling at 2,700 feet. B. H. Cogdell's No. 1 F. E. McKenzie, shut down at 125 feet. Owens & Sloan's No. 1 C. P. Conoway, drilling at 2,000 feet. Magnolia Petroleum Co.'s No. 1 G. W. Womack, cleaning out to drill deeper at 2,630 feet. Mid-Kansas Oil & Gas Co.'s No. 2 Ellwood, drilling at 850 feet. F. P. Zoch and others' No. 1 J. J. Ford, drilling at 625 feet.

Nolan County

Hucony Gas Co.'s No. 1 Arthur Sears, drilling at 1,200 feet.

Pecos County

Benedum & Trees' No. 1 J. C. Trees, spudding at 110 feet. Buell and others' No. 1 W. W. Batchelor, shut down at 255 feet. Cromwell & Kimberlin's No. 1 Scharff-Blackman, rigged up and shut down. Dixie Oil Co.'s No. 1 Hershenson, drilling at 5,258 feet. Transcontinental Oil Co.'s No. 1 Perry, drilling at 3,515 feet. Southern Development Co.'s No. 1 R. G. Heiner, location. Quinby Oil Co.'s No. 1 Townsite, drilling at 3,-230 feet. West Texas Exploration Co.'s No. 1 Macy, shut down at 1,160 feet.

Presidio County

Hadcock & Miller's No. 1 Tootle estate, drilling by casing at 2,200 feet.

Reagan County

H. D. Camp and others' No. 1 University, shut down at 2,786 feet. C. M. Cope and others' No. 1 White, location. Marland Oil Co.'s No. 1 University, location. Marland Oil Co. and Mascho's No. 1 Sawyer Cattle Co., dry and abandoned at 3,202 feet. Marland Oil Co. and Frank Pickrell's No. 1 Sawyer Cattle Co., fishing for tools at 2,330 feet. Moody Oil Corp.'s No. 1 Sawyer Cattle Co., building rig. Roxana Petroleum Corp.'s No. 1 Boyd, rigging up. Ben Simon and others' No. 1 R. A. Walters, drilling at 2,345 feet, sulphur water at 2,168 feet. Texon Oil & Land Co. of Texas' No. 1 University.

Reeves County

Schooler, Slack and others' No. 1 Abram, shut down at 2,415 feet. Grisham & Hunter's No. 1 State land, drilling at 825 feet.

Runnells County

Red Bank Oil Co.'s No. 1 Fowler, rigging up.

Schleicher County

Beavers & Leath and others' No. 1 J. A. and W. T. Whitten, spudded and shut down. Cope & Dalton's No. 1 Sol Meyer, drilling at 1,181 feet.

Scurry County

Camp Springs Oil & Gas Co.'s No. 1 J. O. Quinn, temporarily abandoned Northwest company's No. 1-A H. P. Welborn, dry and abandoned at 3,435 feet.

Stonewall County

Arkansas Fuel Co.'s No. 1 Craft, drilling at 3,825 feet. Ward Syndicate's No. 1 Ward, shut down at 3,828 feet.

Sterling County

Co-Operative Lease & Development Co.'s No. 1-A E. W. Douthit, shut down for casing at 3,032 feet. The Exploration company's No. 1 C. A. Boone, drilling at 2,180 feet. E. D. Rummell and others' No. 2 L. T. Clark, shut down by orders at 1,175 feet.

Sutton County

Chesapeake Oil Co.'s No. 1 Clarkson-Allison, shut down at 3,512 feet.

Taylor County

Sanger Oil & Refining Co.'s No. 1 Cox, shut down at 1,100 feet. Sanger Oil & Refining Co.'s No. 1 Anderson, shut down at 1,916 feet; No. 2 Anderson, drilling at 600 feet; No. 1 J. F. Gillespie, rig. City of Abilene's No. 1 fee, rig.

Terrell County

Sun Oil Co.'s No. 1 Scott, drilling at 660 feet. E. T. Williams and others' No. 1 Snowden, fishing casing at 1,825 feet.

Tom Green County

M. D. Bryant and others' No. 1 Llano County school land, drilling by tools at 2,930 feet. Texon Oil & Land Co. and Marland Oil Co.'s No. 1 Sorrell, rig. World Oil Co.'s No. 1 Pulliam, drilling at 3,150 feet.

Upton County

Atlantic Oil Production Co. and others' No. 1 Baker, location. Dixie Oil Co.'s No. 7 Burleson, shut down at 2,240 feet for pipeline connection; No. 8 Burleson, drilling at 1,665 feet; No. 5 Hughes, spudding at 385 feet; No. 6 Hughes, spudding at 275 feet; No. 7 Hughes, rigging up. Dunning and others' No. 1 Crier-McElroy, top of sand at 958 feet, drilling at 1,450 feet. Gulf Production Co.'s No. 2 M. L. Baker, drilling at 2,-145 feet in lime; No. 1 M. L. Baker-B, drilling at 1,362 feet in shale; No. 1 J. H. Shirk-D, drilling at 2,154 feet in lime; No. 1 Sanger Brothers, 3,210 feet in brown lime. Humble Oil & Refining Co.'s No. 1 A. S. Burleson, 2,155-90 feet, swab 250 feet; No. 2 A. S. Burleson, drilling at 1,755 feet; No. 3 A. S. Burleson, rigging up; No. 1 Ricker & Dodson, 2,121-82 feet, 15 bbls. per hour, then ¾-inch choke went dead. Independent Oil & Gas Co.'s No. 2 Len Taylor, location; No. 3 Len Taylor, rigging up and shut down; No. 4, at 2,026-46 feet, 368 bbls. flowing; No. 5, spudding; No. 6, at 2,-029-2,213 feet, 1 bbl. water per hour at 2,213 feet; plugged off water and swabbed 60 bbls., 9-5, 50 bbls. 9-8; No. 7, fishing at 2,575 feet; No. 8, fishing at 2,275 feet; No. 9, rig; No. 1 Hughes, drilling at 750 feet in salt; No. 3 Emma Wooley, setting 10-inch at 440 feet; No. 4 Emma Wooley, top of salt at 500 feet, drilling at 1,150 feet. Johnson & McCamey's No. 1 Shirk, shut down for 10-inch casing at 525 feet. Kirkwood and others' No. 1 Rankin, show of oil and gas at 3,810-20 feet, shut down at 3,820 feet. McMan Oil & Gas Co.'s No. 1 Mrs. M. L. Baker, 2,145-67 feet, shut down for pump jack; No. 2 Mrs. M. L. Baker, moving in material. Marland Oil Co.'s No. 1 Gibbs, top of sand at 695 feet, drilling at 1,540 feet. Marland Oil Co. and Texon Oil & Land Co.'s No. 1 Halff, spudding at 250 feet. Republic Production Co. and Marland Oil Co.'s No. 4 Baker, drilling at 1,595 feet. Roxana Petroleum Corp.'s No. 1 Della Bowen, completed for 170 bbls. at 2,063-2,133 feet; No. 2, swabbing 35 bbls. at 2,116-56 feet; No. 3 spudding at 365 feet; No. 1 E. S. Hughes, drilling at 2,070 feet. Sartain Brothers & Davis' No. 1 Bull, drilling at 1,225 feet. Skelly Oil Co.'s No. 1 O. P. Jones, repairing rig at 1,500 feet, set 10-inch at this depth. Sun Oil Co.'s No. 4 Burleson, drilling at 1,890 feet; No. 5, drilling at 1,700 feet; No. 6 completed for 65 bbls. at 2,084-2,135 feet. Texas Pacific Coal & Oil Co.'s No. 1 Shirk, swabbed 150 bbls., 9-6, 2,163-85 feet, 110 bbls. 9-7, 108 bbls. 9-8; No. 2 Shirk, drilling at 1,700 feet; No. 3, location; No. 4, location.

MOST OF THE OIL PRODUCED BY FEW

(Contoinued from Page 37)

In the same big year of the European war the State of Texas was credited with a production of 38,750,031 bbls. or an average of 19,375,000 bbls. for each six months. In the first six months of this year four oil companies, the Gulf, Humble, Texas and Magnolia, produced over 21,000,000 bbls. or more than the State's entire output in six months in 1918 when the need for oil was so acute. The new crop of oil companies in the accompanying list of leading producers, which were not operating in Texas as far back as 1918, produced a quantity of crude this year almost as much as the whole state

produced in the same period of that important year in oil history.

Still Room for New Ones

A study of the gross production lists for several years shows a very considerable number of companies, firms and individuals which figured largely in the production situation for one, two, or maybe several years and then disappeared. These for the most part were those lucky ones who may have opened pools, produced the flush output and then sold to one or another of the big companies that figure in the select list here given. Prominent among these might be mentioned such companies as the Waite Phillips Co., the Humphreys-Mexia Co., the Boyd Oil Co., another Humphreys organization: Joe Cromwell, the United North and South Oil Co., which while yet on the list under that name is now owned by the Magnolia Petroleum Co. The greatly increased production of the Barnsdall Oil Co., the Pure Oil Co., the Prairie Oil & Gas Co., the Magnolia Petroleum Co., and others that might be mentioned came partly from the properties acquired by purchase when they took over the entire holdings of operators who preferred to sell rather than continue as a producing organization.

The fact that most of the production is owned by a few companies does not mean that the doors of the oil business are closed to new men or new companies. The present development of the Texas Panhandle Field shows that the new company has as fair a field to work in as the industry ever offered. There for example the Dixon Creek Oil Co. is producing over 10,000 bbls. a day and one many find names like the Westex Oil Co., Canadian River Oil Co., Canyon Oil & Gas Co., Coble & Whittenberg, and others which were not operating a few years ago.

The wildcatter is given just as much encouragement now as ever, and if he is fortunate enough to develop a big production, and wishes to cash in and retire he can get as good a price in 1926 (if not better) than at any time in the history of the industry.

PRESIDENT COOLIDGE ON OIL BOARD, REPORT

PAUL SMITH, N. Y., Sept. 11.—Commenting upon the preliminary report of the Oil Conservation Commission, President Coolidge made it clear that there was nothing ulterior in the conclusion of the investigators. It was pointed out that the report spoke for itself, and that its object was to keep the country informed as to the resources of its oil, gasoline and kerosene, so that the people might conserve the diminishing supply. While the survey was made with special reference to the country's military needs, it had a broad purpose, the President holds, in encouraging economy in oil products.

DEATH OF J. D. PRIBBLE

J. D. Pribble, general superintendent of the Columbian Carbon Co., and a large stockholder in the company, died in Charleston, W. Va., September 1, after a month's illness. Mr. Pribble had been called the father of the Louisiana carbon black industry. He accumulated a large fortune in the development of the industry in that State. He is given large credit for the growth of the Columbian Carbon Co. from a small concern to a corporation with 12 subsid'ary companies, of which the Southern Carbon Co., of Monroe, La., is the most important.

IN LOWER CALIFORNIA

MEXICO CITY, Mex., Sept. 10.—The newspapers here announce that work has been started on the drilling of the first oil well in Lower California. This is located near Ensenada almost on the seashore. Numerous persons have been to look at the rig and are anxiously awaiting reports as to the success or failure of the venture. The well is being put down by Mexican capitalists.

NEW PURCHASES IN PANHANDLE; SPREADING OVER INTO OKLAHOMA

FORT WORTH, Tex., Sept. 11.—While the majority of major operators in the Texas Panhandle have cut down on purchases of new acreage during the past month, several large concerns are spending just about as much money as ever and the Mid-Continent Petroleum Corp., for one, is spending more than formerly. The California Co. recently opened an office in Amarillo and has made a number of purchases in Moore County as a starter, paying as high as $100 an acre.

Two of the largest transactions of recent weeks in the Panhandle were the purchase (reported in The Oil and Gas Journal last week) of a half interest in the holdings of the Shamrock Petroleum Co. by the Prairie Oil & Gas Co. for $1,500,000 and the purchase of a half interest in the royalty under the Cockrell ranch located in the eastern part of Block Y, M. & C. Survey and Block B-3, D. & S. E. Survey, and Blocks M-21 and M-23 in Hutchinson County, by the Marland Employes' Royalty Co. for a reported consideration of $400,000.

The Marland Oil Co. recently took over most of the holdings of Blasdel, Fuqua and Landergin in Hutchinson and Carson Counties, agreeing to start four wells on the properties within the next 120 days, the consideration having been a one-eighth overriding royalty. The various tracts involved in this deal are located in Section 6, Block 1, Brooks & Burleson Survey, Hutchinson County; Sections 123 and 125 and the S half of Section 126, Block 5, Carson and Hutchinson Counties; the W half of Section 119, S half of Section 117, and all of Section 121, Block 5, I. & G. N. Survey, Carson County.

Purchases in Moore County

The California Co.'s purchases in Moore County include the following acreage: The S half of Section 8, J. Poitevent Survey, Moore County, at $42.50 an acre; the northeast quarter of Section 2, at $40 an acre; the northwest quarter of Section 14, at $50 an acre, and the W half of Section 19, at $40 an acre. These tracts are just north of the Flowers & Brookins and Marland Oil Co.'s test and east of the Shamrock Petroleum Co.'s drilling well on the Gober farm.

The highest priced piece of acreage bought by the California Co. recently was the north 160 acres of the E half of Tract 4, Sneed Subdivision, of the O. H. Lindsey Survey, between a mile and 2 miles northeast of the Prairie Oil & Gas Co.'s No. 1 Sneed. The price was $100 an acre.

Near the Moore-Hutchinson line in Moore County, about 8 or 9 miles from the north line of the county, the California Co. also bought Sections 204 and 205 and the S half of Section 201, Block 3-T, all 10-year leases. The consideration was $18,000.

Hansford County is to have another test. A Mr. Caldwell, backed by Chestnut & Smith, has assembled a block centering around the southwest of Section 21, Block 3, G. H. & H. Survey. It carries a drilling contract which specifies that a well must be started within the next 40 days. The Midwest Exploration Co. has purchased one of the "spreads" around this proposed test which were being offered for $12.50 an acre.

Pipeline Extension

The Humble Oil & Refining Co. has enlarged its loading rack at Kings Mill to a capacity of 20 cars, double the number it was previously able to load, and is laying a 4-inch line into the Pampa Pool in Gray County where it is going to build five 55,000-bbl. tanks on the Merten lease. The Humble recently purchased 15,000 bbls. of Hutchinson County crude from the Plains Pipe Line Co., presumably at the market price, and it is understood that the oil is to be shipped to Baytown, Tex., to be used in a refining test. Humble's shipments during the first 20 days of August amounted to 26,568 bbls., compared with 11,062 bbls. during all of July.

The long-awaited completion of the Santa Fe branch line may become a reality soon, although it is probable that the line will not be opened before October 15. In the meantime, the Rock Island has started actual work on its spur line from Amarillo into the Hutchinson County Field and has laid about 7 miles of track.

Oklahoma Panhandle

The activity is still spreading northward into the Oklahoma Panhandle where new blocks are being worked up every week. The Reiter-Foster Oil Corp. has acquired a 6,000-acre block in Cimarron County, Oklahoma, centering around the southwest of Section 22-2n-8e. A well must be spudded in by October 15. The Gladys Belle Oil Co. has contracted to drill a 3,500-foot test on the Wilkins & Valerius block of 8,000 acres centering around the southeast of Section 26-3n-7e, also in Cimarron County. Wilkins & Valerius have retained a checkerboard spread through the block. McKnab of Winfield, Kans., is reported to be assembling a block centering in the southeast of Section 13-4n-7e, same county, and must spud a test within 90 days after titles are approved. These leases are said to have been obtained free for the drilling of a well. The Amerada Petroleum Corp., Indian Territory Illuminating Co. and The Texas Company also figured in recent lease buying in Cimarron County.

COMPLETED PROGRAM FOR A. I. M. E. SESSION

The complete program for the midyear meeting of the Petroleum Division, A. I. M. E., in co-operation with the Mid-Continent Oil & Gas Association and the Mid-Continent Section, A. I. M. E., to be held at Tulsa, Okla., on October 11-14, is given below:

Increasing Production from Oil Fields: With special attention to Mid-Continent.

Monday, October 11, 10 a.m.; F. Julius Fohs, chairman.

1. Increasing Recovery in New Pools:

(1) Solubility of Gases in Crude Oils and Resultant Effects Upon Viscosity and Surface Tension. By C. E. Beecher and I. P. Parkhurst, Empire Fuel Co.

(2) Modern Methods of Equipping and Handling Flowing Wells in Mid-Continent Fields. By C. D. Lockwood, The Oil and Gas Journal.

(3) Gas Lift Flowing of Wells in the Mid-Continent District. By S. F. Shaw, Roxana Petroleum Corp.

(4) Methods of Handling Pumping Wells to Conserve Gas. By C. V. Millikan, Amerada Petroleum Corp.

Monday, 2 p. m.:

(5) Advantages of Unit Operation in Oil Fields; Economic Effect of Increased Recovery Methods. By James O. Lewis, Dunn-Lewis Oil Recovery Co.

Discussion by Henry L. Doherty, Henry L. Doherty & Co.

Tuesday, October 12, 2 p. m.: Alfred G. Heggem, chairman.

3. Improved Drilling and Production:

(1) North-Central and East-Central Texas. Speaker to be announced.

(2) Gulf Coast Fields. By John R. Suman, Rio Bravo Oil Co.

(3) Oklahoma and Kansas. By J. R. McWilliams, Skelly Oil Co.

(4) Panhandle District: Drilling Practice. By E. J. McKee, Phillips Petroleum Co.

Production Problems. By A. F. Hinton, National Petroleum News.

(5) Economic Effects. By Max Bauer, Midwest Exploration Co.

Tuesday, October 12, 7 p. m.:

4. Mid-Continent Oil & Gas Association Banquet; Addresses by some of the heads of the industry.

Monday, October 11, 12:15 p. m.:

5. A. I. M. E. subscription luncheon to plan establishment of local clubs affiliated with division and discuss methods of electing division officers.

Wednesday, October 13, and Thursday, October 14.

6. Trips to Oklahoma oil fields where special methods are in use.

MARTIN B. DALY DIES, STRICKEN IN OFFICE

CLEVELAND, Ohio, Sept. 11.—Martin B. Daly, 66, president of the East Ohio Gas Co., and well known Standard Oil executive, died in his office of a heart attack. Mr. Daly was born on a farm near Mayville, N. Y. In 1878 he began work in the oil fields at Dallas City, near Bradford, Pa., in 1881 being named assistant superintendent of the Warren County Gas, Fuel & Heating Co. During his connection with this company, the Cherry Grove oil field was discovered. The first well drilled in this field is known as the "646."

Later Mr. Daly was engaged in the construction of natural gas plants at Oil City, Titusville and Meadville. In 1886 he was elected general superintendent of the Buffalo Natural Gas Fuel Co. Gas was piped to Buffalo from McKean County, Pennsylvania. The practicability of this enterprise was questioned on account of the field being over 90 miles from Buffalo. The success of this venture, however, led to the piping of natural gas to various cities. The Buffalo company was the first to sell natural gas by meter measurement.

In 1890 the North Western Ohio Natural Gas Co., supplying Toledo and other cities in Ohio, was in serious difficulty by reason of the city of Toledo engaging in the natural gas business in competition. New plants were constructed in

Martin B. Daly

Sandusky, Norwalk, Bellevue and Clyde, and Mr. Daly was in charge of the construction. After completion of the plants, he was elected general superintendent of the entire North Western company. The North Western company is still doing business, while the municipally owned plant was abandoned in 1895.

In 1902, Mr. Daly secured from the city of Cleveland, for the East Ohio Gas Co., a franchise to supply that city with natural gas and was made general manager. In 1906 he was elected president and severed his connections with the North Western company. In 1905 the East Ohio Gas Co. merged with the Cleveland Gas, Light & Coke Co., and the Peoples Gas Light Co., and Mr. Daly was continued as president and general manager of the consolidated East Ohio Gas Co.

Mr. Daily was an ex-president of the Natural Gas Association of America and was also a director in the American Gas Association

CRUDE PRICES

(Continued from Page 149)

pany in Caddo, Bull Bayou, DeSoto, Crichton and Smackover.

*Posted by the Atlantic Oil Producing Co. †Posted by the Gulf Pipe Line Co. §Posted by the Louisiana Oil Refining Corp.

ROCKY MOUNTAIN STATES
Ohio Oil Co.—Midwest Refining Co.
(Effective May 17)

Rock Creek (Wyo.)	$2.25
Salt Creek—	
29° to 29.9°	1.73
30° to 30.9°	1.81
31° to 31.9°	1.89
32° to 32.9°	1.97
33° to 33.9°	2.05
34° to 34.9°	2.13
35° to 35.9°	2.21
36° to 36.9°	2.29
37° and above	2.37
Big Muddy	2.25
Mule Creek	1.75
Grass Creek, light	2.40
Grass Creek, heavy	.90
Elk Basin	2.40
Lance Creek	2.40
Rex Lake	1.45
Osage	2.40
Lost Soldier (Contract)	1.35
Greybull-Torchlight	2.15
Hamilton Dome	1.35
Cat Creek (Mont.)	2.40
Sunburst, (Mont.) (Sept. 14)	1.25
Florence (Colo.)	1.60
Artesia	1.95
Hogback (N. Mex.)	2.45

Note: Salt Creek, Osage, Cat Creek, Greybull and Hogback posted by Midwest Refining Co., and the remainder by the Ohio Oil Co. Both companies post Grass Creek light and Elk Basin.

EASTERN STATES
Joseph Seep Purchasing Agency
(Effective March 8)

Penna Grade Oil in New York Transit Lines (New York)	$3.40
Bradford District Oil in National Transit Lines (Pennsylvania)	3.40
Penna Grade Oil in National Transit Lines (Pa.)	3.30
Penna Grade Oil in Southwest Pa. Lines (West Virginia)	3.30
Penna Grade Oil in Eureka Pipe Line Lines (Pa.)	3.25
Penna Grade Oil in Buckeye Pipe Line Lines (Ohio)	3.05
Cabell Grade Oil in Eureka Pipe Line Lines (West Virginia) (May 17)	2.40
Corning Grade Oil in Buckeye Pipe Line Lines (Ohio) (May 22)	2.55
Somerset Medium Oil in Cumberland Pipe Line Lines (Kentucky) (May 17)	2.50
Somerset Light Oil in Cumberland Pipe Lines (Kentucky) (May 17)	2.65
Ragland Grade Oil in Cumberland Pipe Line Lines (Kentucky) (May 19)	1.25
Gaines (Pennsylvania) (Apr. 27)	2.85
Keister (Pennsylvania) (Feb. 15)	2.30

MIDDLE WESTERN STATES
Ohio Oil Co.
(Effective May 17)

Lima	$2.48
Wooster	2.55
Illinois	2.37
Indiana	2.25
Princeton	2.37
Plymouth	1.90
Waterloo	1.35
*Western Kentucky (Sept. 8)	2.10
†Cumberland, Barren and Monroe Counties, Ky., (May 17)	2.65
**Oil in lines of Stoll Oil Refg. Co. in Oil City, Ky.	2.65
**Oil in lines of Stoll Refg. Co. in Tinsley Bottom, Tenn.	2.46
§Oil Springs (Canada) (May 18)	2.95
§Petrolia (Canada) (May 18)	2.88

**Posted by Stoll Oil Refg. Co.
*Posted by Indian Refining Co.
†Posted by Paragon Development Co.
§Posted by Imperial Oil Co., Ltd.

MEXICO
(Effective May 13)

*Tuxpam light (f.o.b. Mex. ports)	$1.35
§Panuco heavy (f.o.b. Mex. ports)	1.15
Tuxpam (New York)	2.15
Panuco (New York)	1.80

*Plus 32.328c tax. §17.631c tax.

DEPARTMENT ACTIVITIES IN ASSOCIATION WORK

(Continued from Page 36)

uneconomic and therefore indefensible from the standpoint of good business. No law stands in the way of a frank discussion of these conditions and we believe that a useful service in that direction is open to our department of trade and commerce.

Joint Committee on Tax Co-Operation

At a recent meeting of a number of representatives of trade associations a joint committee on tax co-operation was appointed, as follows: James A. Emery, chairman, National Association of Manufacturers. William S. Bennett, Edward Hines Lumber Co.; Fayette B. Dow, Nation Petroleum Association; R. B. Hazzard, National Boot and Shoe Manufacturers Association. McKinley W. Kreigh, American Mining Congress; J. C. Peacock, National Council of American Cotton Manufacturers; H. H. Rice, General Motors Corp.

The purpose of this committee is to co-operate with the joint committee on Internal Revenue Taxation created by the Revenue Act of 1926. This committee consists of five members of the Committee on Finance of the Senate and five members of the Committee on Ways and Means of the House of Representatives.

Our joint committee on Tax Co-Operation is gathering and considering suggestions for changes in the Revenue Act. When these have been approved by the committee they will be presented to the joint committee of the Senate and the House.

OKLAHOMA REFINED MARKET IS EASIER

(Continued from Page 34)

for the U. S. Motor gasoline during August.

In previous years, the biggest call has been for the regulation U. S. Motor fuel despite the increased demand for higher gravities in winter but this year refiners are expecting northern jobbers generally to place new winter fuels on the market to compete with The Texas Company. This will result in a greater domestic demand for higher gravities.

This trend toward a more volatile fuel was demonstrated this summer in lessened demand for the 56-58 450 gasoline. Before this summer this gasoline has been in as great demand as the 58-60 437 (U. S. Motor) product. This year comparatively little interest was attched to this lower grade product. There were only few calls for it and even refiners showed a tendency to cut down its production to a minimum.

Whether the 60-62 400 gasoline will supplant the U. S. Motor gasoline as the latter has the 56 material for summer use remains to be seen but it is known it has grown in popular favor this summer to such an extent that many small as well as large jobbers and marketing companies are being forced to place it on the market.

New Blends

Many jobbers and marketing companies report they have been experimenting for several months on various blends of higher gravity gasolines seeking to bring out entirely different and better fuels than those already on the market. Although no announcement was made of the company's plans, one large jobbing firm only the past week has been buying 64-66 375 in substantial quantities and also has been picking up as much 68-70 360 as possible. Purchases of 68-70 gasoline are something new for this company and the 375 gasoline has not been bought in as large quantities before.

If these new fuels prove successful and can be marketed in commercial quantities, market students are of opinion that entirely new market conditions may arise calling for the manufacture of gasolines of many different specifications rather than the few standard grades as at present.

As with gasolines, kerosenes were inclined to sluggishness during the week. The peak demand for this material is believed past with the tractor plowing season virtually over. However, a revival in demand is expected as soon as the winter lamp burning requirements increase, and, with the gradual decline in production of the product due to more modern refining methods, no great recession in price is looked for at this time. One large buyer still is reported to be needing kerosene and a few purchases were made the past week.

Although a number of buyers had instructions for quite a few single car orders, Oklahoma refiners as a whole found the fuel oil market comparatively quiet Monday and Tuesday. It was apparent that fuel oil was considerably easier and buyers were able to fill their requirements at slight concessions. The market on the lighter fuels, gas oil and distillates continued firm but the demand for these products was not nearly so brisk as in previous weeks.

The fuel oil situation continues uncertain as market students still are loathe to speculate on the extent of the supply this autumn and winter and on the nature of the demand.

Gasoline and Naphtha

As previously mentioned, practically all grades of gasoline and naphtha suffered market reductions the past week due to the generally quiet demand. The U. S. Motor (58 60 437) material was reported bought as low as 10¾ cents Tuesday, but on the other hand, the prevailing quotation to the trade was 11 cents. The lull in demand for the 60-62 400 material also brought lower quotations on that product but apparently 11¼ cents was market bottom. The 64-66 375 gasoline was quoted from 11¾ to 12 cents. Oklahoma sources of 68-70 gasoline were reported sold up.

Natural Gasolines

Natural gasoline prices were not different Tuesday to any extent than a week ago but the slowness of demand was beginning to result in a few ragged edges. There has been an increase in the amount of material available, especially Grade A. Grade C was quoted around 10 cents, with Grade B and Double B at 10⅛ to 10¼ cents and Grade A at 10¼ to 10⅜ cents. Grade C is fairly scarce.

Kerosene and Distillates

Kerosene was available easily at a quarter cent less than a week ago. Buyers reported being able to obtain a few cars at 9 or 9⅛ cents but these shadings under 9¼ cents could not be obtained readily. The prevailing quotations ranged from 9¼ to 9½ cents.

There were no important developments in the distillate situation the past week. All grades continued scarce and prices were steady.

Fuel Oil and Gas Oil

The slowing up in demand for fuels caused some shading of prices in the lower grades. Fuel under 20 gravity could be obtained at $1.32½ cents and the 22-26 material at 1.37½ cents. The 24-26 fuel held at $1.45 but sales over this figure were few. Higher gravities were only slightly changed but buyers could fill their needs while a week ago these products were practically unobtainable.

Gas oil, however, continued strong, being quoted from 4¼ cents up depending on the quality.

Lubricants and Wax

The cooler weather and rains also has lessened the demand for lubricating oils although all manufacturers are in a fairly good position. The movements of all grades was considerably less during August than during July. As winter approaches the zero cold test products of the Gulf Coast refiners will come more and more in demand, thus reducing calls for Mid Continent stocks.

Wax continued soft. Although ordinarily at this time of year, buyers are ready to contract their seasons requirements there has been no indication of activity so far.

CALIFORNIA MARKET COMPETITION KEENER

LOS ANGELES, Calif., Sept. 10.—Competition for gasoline sales in Los Angeles County continues to increase in intensity. Some of the independent stations selling gasoline manufactured by small refiners are advertising 6 gallons for 90 cents or at the rate of 15 cents per gallon. Flight gasoline, the second grade product sold by the Standard Oil Co. of California, which when first introduced a few weeks ago sold at 5 gallons for 93 cents, has been reduced in a few cases to 5 gallons for 90 cents. This gasoline is only sold at independent service stations and the reduction made by the dealers is to combat price cuts made by other dealers handling other cheap gasoline.

Statistics just published show that almost one-fortieth of the world's motor vehicles are owned and operated in Los Angeles County and this without doubt is the big factor in the establishment of the great number of service stations. These figures as of June 30, 1926, show total world registration of 24,589,249, United States registration as 20,517,276, California registration 1,549,093 and Los Angeles County registration as 587,736. This shows that California owns approximately one-twentieth of the world's motor vehicles and that Los Angeles County alone, owns one-third of this amount. While on an average throughout the United States there are six persons per automobile, in Los Angeles County there are only about three. This in itself shows what an excellent market there is in and around Los Angeles for gasoline and lubricating oils, but due to the building of too many service stations, the large consumption has been so split up that many service stations in order to get their share of the business must resort to cutting prices.

One of the latest entrants into the marketing of gasoline and lubricating oils on the Pacific Coast is the California Petroleum Corp. This company, through its taking over of the Ventura Refining Co., Mohawk Oil Co., and more recently acquiring full control of the Olympic-Calpet Refining Co. as well as producing land and refineries in Montana, has placed itself in position to enter the field of marketing petroleum products on a large scale. At present it has a program calling for the expenditure of $5,000,000 in service stations and sub-stations.

Marketers are looking forward to large consumption of fuel oil during the coming winter. Stocks for the most part have been growing but with approaching colder weather, the demand for fuel oil is expected to improve materially.

The United States Emergency Fleet Corp. has just asked for bids for 3,500,000 bbls. of bunker and cargo oil. Bids are to be opened and read publicly at 2 p. m., September 20. This business is very desirable from the oil companies' point of view and competition for it will be very keen.

WILLIAM E. YOULE DEAD

LOS ANGELES, Calif., Sept. 11.—William E. Youle, 79, pioneer oil man and inventor of many devices in oil drilling, died at his home here Thursday.

Mr. Youle was born in Pontiac, Mich., in 1847, and at the age of 16 began working in the Pennsylvania oil fields. Shortly afterward he made his way to Los Angeles. Dreaming of oil riches to be found here, he sought for 10 years to interest capital in his plans to produce oil but to no avail.

Finally with his savings he sank the Moody Gulch well near San Jose in 1877, bringing in the first commercial oil stream in that part of the state. Encouraged with this success, he associated himself with other pioneers of the California oil fields and at once began a study of drilling that resulted in his inventing and patenting many of the tools now used in modern field operations.

OIL ON ENGLISH RAILWAYS

In the House of Commons, Major Ainsworth asked the Minister of Transport the extent to which the railway companies were using oil fuel instead of coal at the present time. Replying, Colonel Ashley said he understood that over 150 locomotives were now running on fuel oil, and that steps were being taken to equip an additional number for this purpose. The matter was one to which the railway companies were fully alive, and was continuing to have their attention.

Making Oil Tests at Gasoline Plants

Additional Apparatus in Distillation Test of Absorption Oil Give More Accurate Data of Interest in Determining Operating Efficiency

*By E. D. Cummings
Gas Investigation Department, Shell Co. of California

Designers and operators of natural gasoline plants are giving a large part of their time and thought to the absorbing unit as an integral part of plant equipment. It is self evident, in an oil absorption plant, that the oil must remove the gasoline from the gas if it is to reach the storage tanks. Thus, along with plant temperatures and pressures and gasoline content of the intake and discharge gas, ranks the condition of the absorbing oil to and from the absorbing unit.

Although of primary importance the methods of testing the lean and rich oils have not kept pace with other phases of plant testing. The purpose of this paper is to summarize present test methods and to outline a few additions to the distillation method of determining the percentage of gasoline held in rich oil.

The best indication of an oil's value as an absorbent is its vapor pressure at the temperature at which it is used in the absorber. Lean oil vapor pressures, at efficient plants, are so low at normal temperatures that accurate determinations are difficult with present methods. The use of Torricellian tubes hardly justifies the results gained.

Other methods of testing absorbing oil depend more or less upon distillation. Distillation tests have an advantage in that they present the gasoline, determined by the test, in a concrete form. They are not difficult of duplication and if the operator is careful his results will be consistent. The sample should be large enough to reduce all errors caused by volume reading to a minimum. If necessary the oil should be dehydrated by filtering, settling or centrifuging.

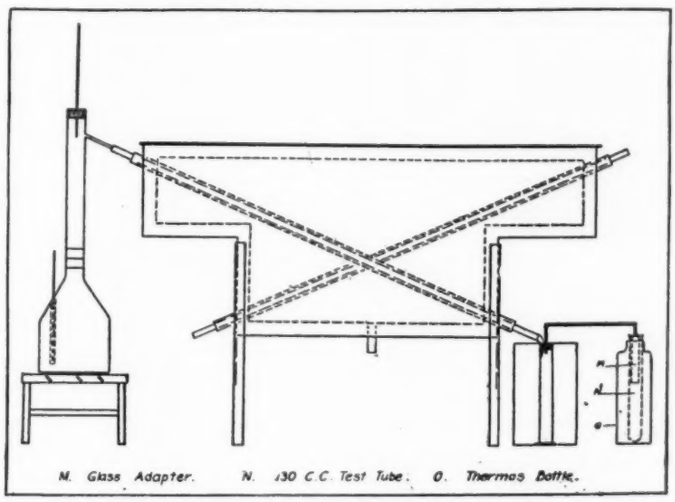
Supply of heat to the distillation must be uniform and easily controlled. A dephlegmating column is essential if a closely cut fraction is to be obtained. Condensing surface should be sufficiently large and at such an angle as to provide easy drainage of the condensed liquid. The distillation rate should be carefully controlled and sufficient time must be allowed to slowly bring the oil up to its initial boiling point. The condenser and receiving graduate should be well iced and agitated so as to maintain a constant temperature.

Apparatus Described

The following method of making lean oil distillations, or rather percent saturation at certain temperatures, gives satisfactory and consistent results:

Flasks are of spun copper, with flat bottoms, having a capacity of 6,200 c. c. Thirteen inch pyrex glass dephlegmator columns, filled with copper chain, were used in all distillations. The dephlegmators are connected to a brass joint, by a packing gland, the brass joint being ground so as to fit the opening in the copper flask. A strip of paper dipped into sodium silicate seals the joint between flask and column. Forty inches of ⅝-inch inside diameter brass tubing (total inside surface 78.5 sq. in.) immersed in an ice and water bath comprises the condensing surface. A 250 c. c. glass graduate, placed in a glass battery jar filled with ice and water and connected to the condenser by rubber tubing through a two-hole rubber stopper, forms the "iced receiver" for the condensed gasoline. The uncondensed vapors can be drawn off into some other form of tail gas condenser through a small test meter. Heat for the distillations is supplied by gas flame or electric hot plate. Electrical equipment has the advantage of uniformity as it can be controlled through a rheostat.

In lean oil distillations, this condensing equipment was sufficient to insure practically complete condensation of the gasoline vapors. The dephlegmating surface was such as to give a very closely-cut fraction of condensed gasoline as well as of the residue remaining in the flask. As four thousand c. c. samples were used the recovered gasoline was large enough to measure accurately and to test for gravity. The gravity of this product varied from 60.0 to 65.0 degrees Baume.



For the distillation of rich oils from an absorber this type of test does not give sufficient condensate, figured as percent saturation of gasoline free oil, to check the modern natural gasoline plant's production data.

Hence, it was necessary to develop a test which would give as complete condensation of the gasoline vapors, driven out of the rich oil, as possible. Four possible solutions appeared. First, the condensing equipment could be maintained at sufficient pressure to insure the desired quantity or quality of condensate. Second, the condensing equipment could be maintained at a sufficiently low temperature to accomplish the same results. Third, a reflux condenser, maintained at low temperatures, might be added to the apparatus then in use. Fourth, the distillation might be run as formerly except that the uncondensed vapors would be passed through a low temperature condenser.

Pressure Distillation

Pressure distillation offered many desirable features as, with proper equipment, variation of the pressure offered ease of control. However, in this case it meant the design and construction of complete new equipment as well as experimental work in regard to the temperature—pressure relations. The pressure still should embody a system whereby the oil sample is drawn directly into the distillation flask under pressure from the absorber or tank being tested.

Maintaining the condensing equipment at temperatures appreciably lower than that of melting ice offers a number of mechanical problems. It must be remembered that temperature is very critical and it must be as constant as possible.

The use of a reflux condenser was considered as a possible solution to the problem and a number of distillations were made using the following procedure:

The distillation equipment was as described above except that a reflux condenser was connected to the outlet of the 250 c. c. "iced receiver." This was placed in a vertical position directly over the glass graduate so that the uncondensed vapors leaving the "iced receiver" passed into the reflux condenser and that portion of these vapors which condensed at the reflux temperature dropped directly into the condensate in the "iced receiver."

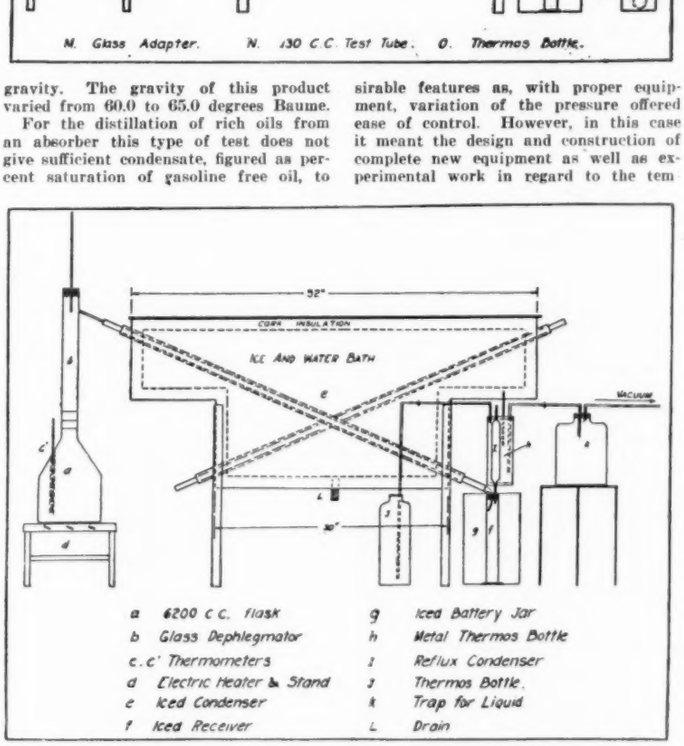
The condenser used was made of ¾-inch brass tubing having about forty square inches of condensing surface. This was surrounded by a hair-insulated metal thermos bottle opened at both ends. The reflux condenser was sealed into the thermos bottle by cork stoppers in such a manner that the uncondensed vapors entered the bottom, the liquid dropping from the same end and the vapors which were still uncondensed at this temperature passing out the top of the condenser. A cold test thermometer was sealed into the thermos bottle and two connections were made into the top of the bottle. One was connected to a vacuum line and the other to a thermos bottle filled with 110 degree Baume gasoline. Thus, we were able to draw gasoline into the metal bottle and, with the aid of pinch cocks, to maintain the desired bath temperature by varying the amount of vacuum on the wild gasoline.

With this equipment, maintaining the reflux at zero Fahrenheit, from a 3,500 c. c. sample of rich oil we were able to condense 197 c. c. of gasoline (5.97 per cent saturation) as compared with 186 c. c. (5.61 per cent saturation) without the use of a reflux. This increased recovery, varied with different samples, between 10 and 15 c. c. and had a calculated gravity of from 90.0 to 95.0 degrees Baume.

It was found to be very difficult to maintain a constant temperature in the gasoline bath. This method did not increase the gasoline yield to a point where the results equalled plant production. Distillation losses indicated that gasoline was escaping through the reflux condenser.

Rich Oil Distillations

A series of rich oil distillations were then conducted using the regular iced condensing equipment with an auxiliary low-temperature condenser. The uncondensed vapors from the 250 c. c. "iced receiver" were passed into a small condenser which was maintained at 80 degrees Centigrade, by a bath of carbon dioxide snow and gasoline. This condenser was of very simple construction. An ordinary quart thermos bottle is filled about four fifths full of a mixture of carbon dioxide snow and 100 degrees Baume gasoline, this serves as the condenser bath. A 130 c. c. test tube was placed, very carefully, into the thermos bottle and a glass adapter inverted into the test-tube so that the small end could be supported by a loosely fitting cork in the top of the test-tube. Uncondensed vapor from the "iced receiver" passed through the inverted adapter (cooled to 80 degrees Centigrade), the liquid condensing and dropping to the bottom of the test-tube while the uncondensed gases escape between the adapter and the test tube and pass through the loosely-fitting cork. The amount of gasoline condensed in this auxiliary condenser varied, on rich oil samples from 25 to 60 c. c. increasing the saturation by from one to two per cent. This gasoline varied



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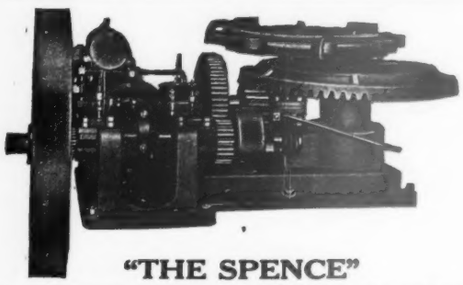

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in gravity from 105 degrees to 115 degrees Baume.

This method of distillation has several desirable features. In the first place it very closely checks plant production. It gives two readings concerning the oil saturation both of which are interesting. The iced condensate might be termed "stable" gasoline and the carbon dioxide snow product as "wild" gasoline. It thus gives at least an indication as to any stabilization being accomplished in the tower. In case it is desired to effect a certain amount of stabilization in the absorbinb unit this carbon dioxide snow condensate, by being a measure of the "wild" material picked up by the oil, offers a good basis to work from to reach the desired oil saturation.

With this same equipment in a series of tests on samples of the same oil, in varying quantities, the "iced" condensate did not show any appreciable change in saturation percentage. The low-temperature condensate showed a greater yield the larger the volume of sample used. Thus the ratio of air to vapor in the system had little effect upon the "iced" condensate, but did affect the carbon-dioxide snow product, which was undoubtedly due to the small surface area exposed to the low temperature. The temperature of the carbon-dioxide snow and gasoline mixture being very consistent.

Gasoline above, termed "iced" condensate, is very similar to natural gasoline, having a Baume gravity of about 77 degrees, a final boiling point very close to the vapor temperature at which the distillation is stopped, and an Engler distillation recovery of about 90 per cent. With the additional condensate from the reflux condenser (held at 0 degrees Fahrenheit) this gravity goes up to 79.0 or 80.0 degrees Baume. When the "iced" condensate is blended with the condensate in the low temperature condenser (held at 80 degrees Centigrade) the gravity varies from 82.0 to 85.0 degrees Baume.

Some work has been done in which samples of rich oil were drawn under tower pressure and vented to atmospheric pressure with corresponding tests being made on the vapors released from the oil. The only available figures are from an oil which after venting to atmospheric pressure gave an "iced" condensate saturation of 5.65 per cent and the carbon-dioxide snow condensate increased this to 6.95 per cent (1.3 per cent increase).

Forty thousand cubic centimeters of this oil were drawn under 25-pound gauge pressure (at 94 degrees Fahrenheit) into a water-filled pressure sampler. Water was withdrawn, as oil entered the sampler, until the sampler was filled with oil the pressure being then released. The vapors released measured 1.45 cubic feet and from this 21.0 c. c. of liquid condensed in a low temperature condenser at 80 degrees Centigrade, only 8.0 c. c. being stable in an ice bath. On a basis of a 4,000 c. c. sample this 21.0 c. c. of liquid lost in sampling would reduce the total condensate by only 2.1 c. c. Calculating on a basis of complete condensation of the 1.45 cubic feet of vapor would give 0.145 cubic feet of vapor released from a 4,000 c. c. of rich oil. At 32 cubic feet of vapor per gallon of liquid this would give 17.15 c. c. of gasoline or a fraction over 0.4 per cent saturation lost by reducing to atmospheric pressure.

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SALT LAKE CITY, Utah, Sept. 11.—The California Petroleum Company of Utah filed articles of incorporation here. The capitalization authorized is $5,000,000, divided into 50,000 shares. R. E. Bering, vice president of the California Petroleum Company, is named as president of the Utah subsidiary; Charles C. Stanley, general counsel of the parent company, vice president, and Ashley D. Boyle, Salt Lake City, attorney, secretary.

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International Oil Controversy Being Amicably Adjusted

By N. O. Fanning

New York Bureau, The Oil and Gas Journal, 30 Church St., New York

NEW YORK, Sept. 11.—In an article written several years ago, the writer called attention to the need of the utmost tact, and diplomacy of the highest order, in the settlement of disputes then existing between nations over control of oil supplies. To those Americans who have followed with dismay the recent debt controversies, the record of the oil fraternity is submitted as proof that those qualities still exist among men.

In 1919 and 1920, a world still wrecked with the aftermath of war, was treated to an endless amount of written material related to the international oil war, the fight for world control of oil resources which was, it represented, destined to place a single nation in control of every barrel of oil to be produced, with all the others grovelling at its feet with extended hands begging for a share.

That this story of friction was based in part on facts is common knowledge to all. In fact the dispute had gone so far as to bring home to those engaged in it that a peaceful solution must be worked out at all costs. Oil men submit that the same spirit which has resulted in a successful conclusion of the international oil dispute could also solve the dept question.

The fact is that the oil business will probably grow more and more into an international proposition, inasmuch as certain countries have large production, but little use for it, while others are placed in a contrary position. Why cannot oil, therefore, prove a bond of international fraternity, instead of what many had feared that it would be, namely a constant source of friction between nations.

Still Much to Be Done

That all nations have let down their barriers to oil development and have thrown their doors open to citizens of others nations if of course not true. There is still much to be done. The chief accomplishment so far lies in the apparent agreement between the principal companies engaged internationally in the oil business, which has resulted in harmony "at the top."

Looking back six or seven years, it appears remarkable that the difficulties existing at that time, should be so little talked about today. An explanation lies, however, in the fallacy of some of the assertions made then, on which contentions were based. One of these claims was that the United States, which had the largest production of crude at the time, was striving to control the bulk of the reserves outside its borders. The other outstanding one was that within ten years or so, the American fields would be dry, and this country would have to buy all of its oil from Great Britain. The humor in these predictions is now obvious.

But there were many real bases for friction. Some of these still remain, and have to do principally with the laws of the various countries governing oil development, related especially to aliens. But even these are based, at least partly, on a misconception of facts related to the oil business.

The tendency on the part of many countries to place barriers in the way of oil development, even by their own nationals, and to levy onerous taxes on production or exports, is too marked not to warrant close study. These restrictions are enforced often in good faith, but in ignorance of the facts on prospects. They are based on the belief that the consumption of petroleum will go on increasing indefinitely at the same rates as up to the present time, and therefore that the nation hampering development now will have oil resources later on when all other nations are drained dry.

In other instances, taxes are levied, so that although the nations enforcing them perhaps receive a larger percentage of the value of the oil recovered, they fail to

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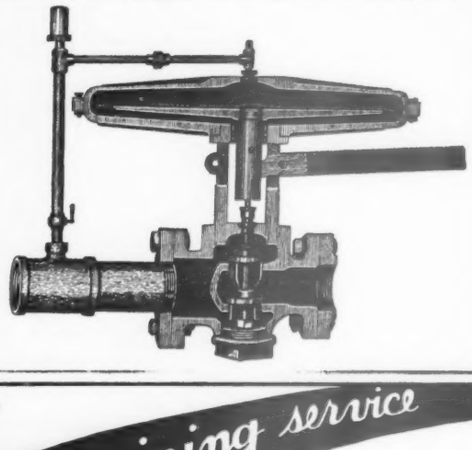

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calculate the amount they would receive were production unrestricted, and the amount of oil recovered therefore much greater. The American nation, for instance, has profited, both as a nation and individually as to its citizens from its oil production, with enforcement of few onerous taxes and restrictions.

But some other nations take it for granted that the fact we are spending money in developing oil abroad, and are now using foreign oil in our refineries to a certain extent, proves that the United States has squandered its domestic resources and is becoming dependent on outside nations. To the contrary our domestic reserves are still enormous. However, economic conditions dictate the use of oil from other countries, where it can be delivered to their domestic refineries more cheaply than that from our own inland fields. These other nations, meanwhile, are getting the benefit of the oil development in being able to supply the cheaper oil for the world to use. The mistake made is in attributing acts dictated by economic necessity to less worthy causes.

Leaders in Amity

There are three principals, as everyone knows, in the international field, who have now patched what difficulties they might have had, when they fully realized there is enough oil to go around. These are the Standard Oil Co. of New Jersey, the Dutch-Shell combine and the Anglo-Persian Oil Co. We now find the three units engaged in development in practically every field, with an almost equal share in the Near East, Russia and Rumania; with the Anglo-Persian and Dutch-Shell dominant in the Far East, and with the Standard Oil Co. dominant in the western hemisphere, but still with each represented in all of the principal divisions. Witness the following recent developments and facts:

There has been an agreement, apparently satisfactory to all interested nations, with regard to the long disputed Iraq territory.

Leading companies are reported to have made an agreement with regard to their attitude toward the Russian oil industry, which has resulted in a resumption of commerce in oil with that country.

The Standard Oil Co. has purchased valuable exploration rights in South America from the British Equatorial Oil Co., a subsidiary of the Anglo-Persian Oil Co., and from the British Controlled Oilfields, Ltd., an independent British concern.

It is reported that the Dutch-Shell combine is considering disposing of one of its large Venezuelan concessions to an American company.

American companies have purchased valuable oil properties in Persia and in the Dutch East Indies.

One of the largest oil companies operating in the United States is a subsidiary of the Dutch-Shell combine.

Where Personalities Count

The oil industry needs men of diplomatic ability, and luckily has been blessed with a great many of them. The late Alfred C. Bedford took a leading part in smoothing out the difficulties which arose after the war with regard to petroleum. Another leading personality who still can lend his valuable influence in international oil affairs is that of Sir John Cadman, chief technical advisor of the Anglo-Persian Oil Co. He is well known in every country that has had to do with petroleum and especially favorably known in the United States.

Succeeding Alfred C. Bedford in the task of handling oil matters of international importance is Walter C. Teagle, president of the Standard Oil Co. of New Jersey, whose dynamic personality has been felt wherever his company's interest was concerned. Sir Henri Deterding, director of the Royal Dutch Co., is another who has contributed to the present peaceful state of international oil affairs.

It is to be hoped that the work of men like these will ultimately result in the breaking down of many foolish barriers still placed by nations in the path of equitable and economic oil development.

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Central Ohio	54	300	16	29
Lima	38	549	4	0
Indiana	33	631	6	8
Michigan	11	157	3	0
Illinois	34	595	13	1
Kentucky	112	1,826	21	2
Tennessee	1	500	0	0
Kansas	222	11,057	77	9
Oklahoma	539	75,449	169	45
N. Cen. Texas	490	26,509	187	6
Panhndle Tex.	107	67,915	2	2
E. Cen. Texas	25	22,093	11	0
W. Cen. Texas	43	4,937	14	0
Gulf Coast	105	93,475	28	2
SW Texas	81	12,577	11	5
Arkansas	104	4,843	23	7
N. Louisiana	110	5,778	38	15
Wyoming	47	5,238	4	1
Montana	48	5,779	12	3
Colorado	7	329	2	1
N. Mexico	15	900	4	0
Total Aug.	2,726	344,084	714	143
Total July	2,867	324,032	867	208
Difference	141	20,052	153	65

Summary of New Work

Field—	Rigs	Dry	Total
Eastern	144	560	704
Central Ohio	24	97	121
Lima	2	55	58
Indiana	7	48	55
Michigan	12	26	38
Illinois	7	57	64
Kentucky	8	179	187
Tennessee	0	15	15
Mississippi	5	10	15
Alabama	0	4	4
Florida	6	7	13
Kansas	76	338	414
Oklahoma	231	1,135	1,366
North Central Texas	82	658	740
West Central Texas	53	211	264
East Central Texas	15	54	69
Panhandle, Texas	122	454	576
Gulf Coast	73	199	272
Southwest Texas	41	104	145
Arkansas	31	93	124
North Louisiana	36	126	162
Wyoming	34	328	362
Montana	15	143	158
Colorado	19	100	119
Utah	3	31	34
New Mexico	8	146	154
Total, August	1,055	5,178	6,233
Total, July	1,068	5,114	6,182
Difference	13	64	51

Note—In the following report the Section, Township and Range are given first; then the farm, the owner, the serial number of the well and the initial production of the well. The rigs and wells drilling are set forth in similar manner. In lines where the Section, Township and Range are missing the wells are located in the Sections, Townships and Ranges which appear next above in the report.

OKLAHOMA FIELDS

Summary of Wells Completed

County—	Comp.	Prod.	Dry	Gas
Osage	67	12,571	15	1
Tulsa	7	42	18	5
Washington	18	146		2
Nowata	17	229	2	
Rogers	20	189	7	1
Okmulgee	53	2,071	26	8
Seminole	30	21,373	6	
Okfuskee	15	1,105	7	2
Hughes	14	3,237	4	1
Muskogee & Wagoner	20	471	9	2
Creek	68	5,123	19	4
Pawnee	15	541	3	2
Kay	28	12,970	5	3
Payne	13	1,689	4	1
Lincoln	15	2,300	6	
Garfield	33	7,081	11	4
Grady	7	190		3
Stephens & Cotton	16	164	8	2
Carter	29	3,069	7	2
Miscellaneous	22	478	12	6
Total August	539	75,169	169	45
Total July	598	82,914	207	49
Difference	59	17,465	38	4

Summary of Rigs and Wells Drilling

County—	Rigs	Drlg.	Ttl
Osage	18	81	99
Tulsa	4	16	20
Okmulgee	21	76	97
Seminole	42	139	181
Okfuskee	13	45	58
Hughes	4	50	54
Muskogee & Wagoner	5	23	28
Creek	41	130	171
Pawnee	14	34	48
Kay	6	89	95
Payne	5	31	36
Lincoln	2	39	41
Grant	1	11	12
Noble	1	18	19
Garfield	6	81	87
Grady	8	28	36
Comanche	3	19	22
Pontotoc & Garvin	5	16	21
Stephens & Cotton	6	37	43
Jefferson	1	12	13
Carter	10	70	80
Miscellaneous	15	90	105
Total August	231	1,125	1,366
Total July	235	1,207	1,442
Difference	4	72	76

OSAGE COUNTY
WELLS COMPLETED

12-27-5e Phillips Pet. 5 155
Phillips Pet. 12 1269
Phillips Pet. 14 600
7-27-6e Phillips Pet. 15 200
21-26-6e Phillips Pet. 11 300
31-26-8e New England O. & P. L. Co. 1 dry
22-23-10 Rex Pyramid Oil 1 ..... dry
22-23-10 Roggem & Davis 17 ..... dry
35-23-10 Roggem & Davis 17 10
22-24-12 Commercial Drlg. Co. 3 10
15-28-11 Ross & Brown 12 5
12-27-5e Phillips Pet. 15 550
7-27-6e Phillips Pet. 14 125
Phillips Pet. 16 930
Phillips Pet. 10 605
15
21-27-12 J. W. Dyson 1 375
21-26-6e Phillips Pet. 9 ..... dry
32-26-11 Ohio-Osage Oil 2 ..... dry
11-25-8e Comar Oil 1 ..... dry
28-25-6e Phillips Pet. 4 100
5-25-12 Arthur Oil 25 10
20-24-9e Tidal Oil 1 60
27-24-10 Winona Oil 4 30
7-21-9e W. S. Mitchell 3 ..... dry
11-20-11 Sand Springs Home 4 ..... dry
29-20-12 Ben C. Conner 1 ..... dry
21-25-6e The Prairie O. & G. 9 150
The Prairie O. & G. 10 15
The Prairie O. & G. 11 50
The Prairie O. & G. 1 ..... dry
36-24-11 The Prairie O. & G. 1 2
15-29-10 Keener O. & G. 18 15
Keener O. & G. 19 5
35-29-11 Osage Dev. Co. 41 12
31-29-12 A. D. Simmons 2 ..... gas
6-26-5e Barnsdall Oil 1 ..... dry
19-25-8e A. G. Oliphant 3 ..... dry
30-25-8e Lewis Oil 3 370
28-24-10 Peters Pet. 6 10
13-23-10 American O. & R. 22 10
35-22-8e Skelly & Moore 4 5
3-22-9e Sterling O. & G. 7 40
34-22-10 Tidal Osage Oil 19 15
7-21-9e W. S. Mitchell 4 10
17-21-11 Oklahoma Natl. Gas 711 ..... gas
15-21-12 Tidal Oil 8 30
5-20-11 Pioneer Pet. 8 20
11-20-11 Sand Springs Home 2 30
21-29-9e Winona Oil 4 10
27-28-6e Laured O. & G. 1 ..... dry
1-27-5e Phillips Pet. 8 2730
Phillips Pet. 10 700
2-27-5e Skelly Oil 4 150
35-27-5e Mid-Kansas Oil 1 100
7-27-6e Phillips Pet. 7 400
Phillips Pet. 13 1450
7-27-11 Osage Gas Prod. Co. 3 ..... dry
21-26-6e Lewis Oil 7 400
Phillips Pet. 10 300
34-25-11 Devonian Oil 16 10
21-22-9e Marky Oil 8 50
4-22-11 Kewanee O. & G. 5 50
Kewanee O. & G. 6 25
5-22-11 Kewanee O. & G. 15 20
11-21-7e Gypsy Oil 1 ..... dry
2-21-11 Lawrence Gas Co. 2 ..... dry
30-21-12 Barnsdall Oil 18 60
Elliott & Smith 25 2
5-20-11 Sand Springs Home 5 40
67
Wells completed 12,571
Production 15
Dry 1
Gas 9,000,000
Gas production .....

TULSA COUNTY

14-19-10 Robinson, Holmes et al 1 20
4-18-13 Roy, McAllister-Milburn 1 ..... dry
11-18-13 Simon, Hall & Hazen 1 ..... gas
18-18-14 Thatcher, Edwards et al 1 ..... gas
9-17-14 Perryman, H. & M. Oil 3 ..... dry
4-16-13 Stewart, The Texas Co. 6 2
Stewart, The Texas Co. 3 2
5-16-13 Berthoff, Thompson & Black 5 75
10-16-13 Sharp, Keener O. & G. 6 10
18-16-14 McCoy, Shaffer O. & R. 5 ..... dry
28-20-14 Grovitt, J. F. Maiers 1 ..... dry
28-20-14 Grovitt, J. F. Maiers 1 ..... dry
9-21-13 Baker, Devonian Oil 16 5
19-21-13 Martin, Jack Reed 13 ..... dry
31-21-13 Collins, Tidal Oil 4 2
23-19-10 Boles, The Prairie O. & G. 2 40
10-19-10 Riverbed, The Texas Co. 1 ..... gas
23-19-10 Unallotted, W. E. Brown Oil 4 75
Unallotted, W. E. Brown Oil 5 ..... dry
Postoak, Red Bank Oil 3 ..... dry
Postoak, Red Bank Oil 4 ..... dry
31-19-12 Keefer, Sunray Oil 2-A 50
32-19-13 Orcutt, Shreve et al 10 ..... dry
4-19-14 Grayson, Johnson et al 2 ..... gas
5-17-13 Porter, Suppes et al 1-A 15
11-17-13 Allen, Holmes et al 1 20
24-19-11 Unallotted, Sand Springs Home 1
5-16-13 Harry, Jolly-Ogg Oil 1-A ..... dry
Strip, J. L. Selby 1 ..... dry
7-16-14 Jones, Savoy Oil 2 ..... gas
16-16-14 Mason, Burke Gibbs Oil 5 15
4-19-12 Childers, Posey Short 1-A ..... dry
21-19-12 Sango, Sunray Oil 1-A ..... dry
29-19-12 Postoak, Continental Oil 1 ..... dry
8-17-13 Posey, Bynum et al 14 2
4-16-13 Buck, Petroleum Co. & Miss'r'i 8 2
12-16-13 Copper, W. O. Dickerson 3-A ..... gas
13-16-13 Techoma, Cates Bros. et al 3-A ..... dry
8-21-14 Leap, Gillette 1 ..... dry
13-20-14 Breeden, W. W. Winsor 1 12
7-20-13 McNulty, Echo Oil 4 10
26-21-12 Lewis, Smith & Co. 1 8
21-21-13 Collins, Tidal Oil 6 2
42
Wells completed 591
Production 18
Dry 5
Gas 23,500,000
Gas production .....

WASHINGTON COUNTY

20-26-14 Thomas Hrs., Dixon & Strimple 7 12
Thomas Hrs., Dixon & Strimple 8 10
19-26-14 Tatum, H. O. Dixon 11 10
35-25-13 Lives, Earl Beard 14 10
31-28-14 Janeway, National Oil & Gas 1 10
20-28-14 Cato, Phillips Pet. 16 2
Cato, Phillips Pet. 15 2
2-27-13 Fee, D. M. Taylor 1 ..... gas
18-29-13 Welch, Alimo Oil 9 10
23-21-12 Bilth, B. Robinovitz 6 5
26-27-13 Lyman, Ardae Oil 12 22
20-26-14 Thomas Hrs., Dixon & Strimple 9 3
15-28-13 Samuels, Georgia Oil & Gas 1 7
10-28-13 Trott, Oneida O. & G. 27 20
13-25-13 Fee, H. C. Campbell 33 3
2-27-13 Tyler, D. M. Tyler 1 ..... gas
31-28-14 Knetsly, Ayling & Mancill 7 10
36-28-13 Janeway, National O. & D. 5 10
Wells completed 18
Production 146
Gas 2
Gas production 300,000
NOWATA COUNTY
31-25-17 Campbell, The Prairie O. & G. 29 50
28-27-16 Robbins, F. L. Benage et al 1 5
27-26-15 Kreider & Speir, Franklin O. & D. 8 ..... dry
20-26-15 Thomas, J. J. Riner 1 30
13-26-15 Lane, Earl Beard 1 25
27-26-15 Stout, J. A. Stager 1 15
20-26-15 Thomas, J. J. Riner 2 25
15-28-14 Lowry, Tidal Oil 3 5
31-25-17 Campbell, The Prairie O. & G. 15 22
33-27-16 Graham, Tidal Oil 11 10
4-25-15 Liggins, W. V. Horner 1 1
10-26-15 Goldaby, Jacobs et al 1 10
13-26-15 Janzen, Jane Oil 18 2
Lane, Earl Beard 2 3
Janzen, Jane Oil 19 ..... dry
9-25-14 Randolph, J. F. Brodeuh mer 2 5
27-28-14 Moore, D. G. Maxwell 2 11
Wells completed 17
Production 229
Dry 2
ROGERS COUNTY
9-21-17 McElyea, Weber & Qualls 2 ..... dry
6-22-17 Messer, A. E. Lynch et al ..... dry
9-21-17 McElyea, Weber & Qualls 4 60
20-24-16 Gilmore, Tidal Oil 10 1
Gilmore, Tidal Oil 11 1
29-24-17 Cochran, F. B. Goodman et al 1 ..... dry
Spade, Tidal Oil 6 20
Bayless Tidal Oil 5 20
Hollis, Frank Bushfield et al 5 25
20-24-16 Gilmore, Tidal Oil 12 1
Gilmore, Tidal Oil 13 1
6-19-17 Mason, E. E. Maxon 2 ..... gas
3-20-17 Setser, Hadley & Mitchell 1 ..... dry
Setser, Hadley & Mitchell 2 ..... dry
29-24-17 Cochran, S. A. Lane 4 ..... dry
Hollis, Frank Bushfield et al 6 10
Spade, Tidal Oil 6 15
Hollis, Frank Bushfield et al 7 15
Spade, Tidal Oil 7 20
28-24-17 Dishman, Harry Kiskaddon 1 ..... dry
Wells completed ..... -
Production 20
Dry 185
Gas 7
Gas production 1
2,000,000
OKMULGEE COUNTY
25-13-11 Tobler, The Prairie O. & G. 2 ..... dry
17-15-11 Gibson, Shaffer O. & R. 7 115
19-15-12 Paxton, Slater et al 1 3
23-14-11 Crossland, Sherry et al 2 ..... gas
5-13-12 Baker, Sheldon & Amerada 1 ..... dry
10-15-13 Hood, Red Bank Oil 1 ..... dry
3-15-14 Andrews, R. & Vincent 1 32
16-15-14 L. Alexander, Jolly & Ogg Oil 2 60
21-15-14 S. Garnett, Jolly & Ogg Oil et al 2 720
7-14-13 Lacey, Sperry & Mills 5 50
14-14-14 Colbert, J. E. Wallace 3 ..... dry
18-14-15 A. Rentie, C. T. Smith 9 ..... dry
16-13-13 Sanger, McCulloch Oil 4 ..... dry
21-16-11 Marton, Sheridan Oil 1 ..... dry
30-16-13 Tiger, Enfisco Oil 1 ..... gas
20-15-14 Gibson, Shaffer O. & R. 1 ..... dry
5-14-11 McIntosh, J. H. Rebold 4 ..... dry
McIntosh, J. H. Rebold 5 ..... dry
11-13-12 Tilley, Rebold Brig. Co. 2 ..... gas
32-13-12 Unallotted, Amerada Pet. 2 ..... dry
32-12-12 Been, Raleo Oil 7 20
7-15-13 Field, Devonian & Independent 9 ..... dry
10-15-14 Sells, W. B. Pine 1 25
13-14-14 Rentie, Elm Oil 7 10
20-14-14 Sadler, F. E. Perkins 19 ..... dry
35-14-14 Anderson, J. L. Selby 32 25
15-13-14 L. Doyle, Cal Cul Oil 5 40
L. Doyle, Simms Oil 17 75
24-16-12 Tiger, Devonian Oil 7 25
34-16-14 Peters, The Texas Company 1 ..... dry
20-15-12 Adams, D. D. Mickelson 6 ..... dry
4-14-11 Lunsford, Sidwell Drlg. Co. 1 60
11-14-12 Gill, Kingwood Oil 1-A ..... dry
36-14-12 Prince, W. B. Pine 1 ..... gas
14-13-11 Strip, Gibson, Zahnleer et al 1 ..... dry
16-15-12 Peters, G. C. Parker 1 ..... dry
19-15-14 S. Perryman, Custer Oil 4 ..... dry
5-14-13 Ragon, Turner et al 1 ..... dry
14-14-14 D. Colbert, T. B. Slick 2 75
3-13-13 Foster, Sheldon Oil 1 ..... dry
26-16-11 Huston, Gray Oil and Paraffine Oil 1-A ..... dry
31-16-11 Peters, Sheridan Oil 1 ..... gas
6-14-12 Hawkins, Moffitt & Slick 6 ..... gas
17-11-12 Summers, Decius 2 ..... gas
15-15-14 Francis, McCulloch Oil 1-A 360
25-14-13 Foster, J. L. Selby 3 ..... gas
1-14-14 D. Harris, Neb. Okla. Oil 4 10
22-14-14 B. Wright, Clarion Oil 7 3
22-13-14 Dunn, Simms Oil 6 ..... dry
28-13-14 Doyle, Columbus Drlg. Co. 13 ..... dry
29-13-14 M. Wiley, F. E. Cusek et al 4-A 25
1-11-13 Brown, L. C. Wheeler 2 ..... dry
10-11-13 Bruner, U. S. Zinc Co. 1 ..... gas
Wells completed 53
Production 2071
Dry 26
Gas 8
Gas production 21,000,000
SEMINOLE COUNTY
24-9n-6e James, I. T. I. Oil 8 2044
18-9n-8e Bowlegs, Gypsy Oil 1 57
10-9n-5e Simpson, Magnolia Pet. 1 161
24-9n-6e James, Amerada Pet. 1 27
14-8n-7e Davis, Gypsy Oil 1 ..... dry
31-8n-8e Salinda, M. R. Ramsey 2 2335
Sampson, W. R. Ramsey 2 ..... dry
14-8n-7e Porter, The Prairie 1 ..... dry
33-10-6e Kinkade, The Prairie O. & G. 1 1828
15-9n-6e Noble, Tidal Osage Oil 1 10
24-9n-6e Mayhue, Tidal Osage Oil 2 789
18-9n-8e Peter, Southwestern Pet. 4 15
23-8n-7e L. Walker, Magnolia Pet. 1 26
32-8n-8e E. Parker, Magnolia Pet. 1 ..... dry
5-7n-8e R. Simon, Independent & Atlantic 3 150
Skinner, Magnolia Pet. 10 1192
6-7n-8e Knight "C," Dixie Oil 3 814
10-11-8e Davis, Transcontinental Oil 1 ..... dry
4-10-8e Yarbro, Sinclair Oil 10 100
36-8n-8e Bowlegs, Gardner Pet. 1 ..... dry
31-8n-8e Salinda, W. R. Ramsey 5 25
6-7n-8e Hawkins, Buttram et al 1 ..... dry
Davis, Magnolia Pet. 3 ..... dry
34-10-6e Grayson, Mid-Cont. Pet. 1 892
26-9n-6e Grisso, Independent & Garland 1 5880
18-9n-8e W. J. Jefferson, Shaffer O. & R. 4 10
Smith, Winona Oil 1 100
32-8n-8e E. Parker, Magnolia Pet. 2 1642
6-7n-8e Knight "A," Dixie Oil 2 2908
Carolina, Homaokla Oil 4 607
Wells completed 30
Production 21,373
Dry 6
OKFUSKEE COUNTY
27-12-10 Harjoche, The Texas Company 1 ..... dry
32-12-11 Hulsey, Josey Oil 1 300
Hulsey, Josey Oil 3 ..... dry
33-12-11 McCoy, Josey Oil 4 300
3-12-11 Morgan, Barnsdall Oil 3 300
35-11-9e Berryhill, Mid Kansas Oil 1 ..... gas
21-10-9e Tecumseh, Kingwood Oil 1 ..... gas
7-13-10 Taylor, L. E. Cooper & R. D. Connelly 1 ..... dry
3-12-10 Hiwen, Alex Bays et al 1 ..... dry
10-12-11 Randall, Phillips Pet. 3 75
13-12-11 Harjo, Amerada Pet. 15 70
15-12-11 Henry, Champlin Refg. Co. 3 ..... dry
10-12-11 Randall, Phillips Pet. 2 ..... dry
35-11-9e Harjo, Gypsy Oil 1 60
8-11-11 Mahardy, J. K. Leard et al 1 ..... dry
Wells completed 13
Production 1105
Dry 7
Gas 90,000,000
HUGHES COUNTY
5-7n-8e Ferguson, J. K. D. Shaffer 1 ..... dry
20-5n-10 Carson, Gribs & Kerr 2 ..... dry
5-7n-8e M. Garner, Dixie Oil 4 600
29-8n-9e Carnegie, Papoose Oil 1 ..... dry
26-9n-9e Davis, Independent O. & G. 2 358
22-9n-9e Manley, Josey Oil 2 237
5-7n-8e M. Garner, Dixie Oil 5 592
M. Garner, Magnolia Pet. 1 237
1-9n-9e N. Cain, Minnehoma Oil 3 ..... dry
5-7n-8e Frederick, Amerada Pet. 13 230
M. Garner, Dixie Oil 6 1200
Wells completed 11
Production 3297
Dry 4
Gas 1
Gas production 30,000,000
MUSKOGEE AND WAGONER COUNTIES
21-18-16 Tiger, Eastern Oklahoma Pet. 1 ..... dry
11-17-16 Robbins, R. E. Terry et al 1 ..... dry
11-16-16 Lewis, Devonian Oil 1 ..... gas
9-15-15 Simmons, Crandall & Murta 2 ..... dry
18-15-15 Ware, Wirick & King 3 ..... dry
5-14-19 Crittenden, C. M. Bradley et al 3 120
2-14-18 Cherry, Jolly-Ogg Oil 1 75
17-14-17 James, R. H. Pierce 2 10
13-16-15 Littlehead, A. A. Landis 1 10
25-17-16 White, Schlingman Grustee 5 15
2-17-16 McIntosh, W. C. Hatch et al 1 ..... dry
34-17-15 Wilson, O. S. West & Co. 5 30
26-17-16 Drew, W. B. Pine 3 ..... dry
26-17-16 Barnett, Mitchell Oil 1 ..... gas
2-16-14 Still, Little Ed Oil 14 5
19-18-16 Moody, J. Stryker 2 ..... dry
23-18-16 Childers, Mayslow Oil 1 ..... dry
29-18-16 Hawkins, H. Hornecker et al 1 ..... dry
25-17-15 Vandervliev, Culp et al 4 175
Wells completed 20
Production 471
Dry 9
Gas 2
Gas production 8,500,000
CREEK COUNTY
13-19-8e Ross (E.) Gled Oil 1 50
Peters, Burlengane & Sharp 8 100
22-17-7e Fife, Tidal Oil 6 10
22-17-8e Mitchell, Barnsdall Oil 3 ..... dry
27-17-8e Alec, T. B. Slick & Stover Drlg. Co. 2 ..... dry
5-16-8e Roberts, Black Gold Oil 2 20
31-15-8e Bigpond, Carter E. Davis 1-A ..... dry
2-14-8e Ponds, Gypsy Oil 9 115
31-19-9e Barnett, Selby O. & G. 2 37
11-17-10 Unallotted, O. M. Irelan 1 ..... gas
Wrightsman, Wilcox & Witten 2 ..... gas
24-17-10 Strip, Hooker & Warren 2 35
Dawson, Mid-Cont. Pet. 1 36
Bucktrot, Pioneer Pet. 7 1080
Dawson, J. H. Wright 14 50
Tahkaney, J. H. Wright 12 75
25-17-10 Goudy, O. M. Irelan 1 60
27-16-9e Strip, Shaffer O. & R. Co. 1 ..... dry
12-16-10 Unallotted, Sherry et al 1 ..... dry
30-15-9e Foster, Skelly Oil 5 30
Unallotted, C. G. Tibbens 27 780
17-14-10 McNevins, C. F. Noble 1 ..... dry
29-18-9e Sier, J. A. Hull 1 ..... dry
6-18-12 Bigpond, Regal Oil 28 100
Sango, Sunray Oil et al 7 75
3-17-9e Simmons, The Texas Co. 2 80
24-17-9e Duce, McCulloch Oil et al 1 ..... dry
24-17-10 Bucktrot, Pioneer Pet. 8 240
29-17-11 Schmidt, Henry & Avers et al 1 ..... dry
8-16-10 Sivdan, Williams & Cole 1 ..... dry
30-15-9e Unallotted, C. G. Tibbens 3 25
20-14-10 Strip, T. B. Slick 2 100
23-14-10 Scott, Plymouth Pet. 1 ..... dry
3-17-9e Hope "A," The Prairie O. & G. 3 50
19-15-8e Roberts, The Prairie O. & G. 1 ..... dry
33-18-12 Alexander, The Prairie O. & G. 14 ..... dry
3-17-9e Hope "A," The Prairie O. & G. 85
19-17-10 Hay, Carpenter-Stover 1 20
19-17-10 Dickson, Independent O. & G. 2 50
22-17-10 Gwin, Dillard et al 1 ..... dry

24-17-10 Dawson, Mid-Cont. Pet. 2... 20
1-16-11 Anthis, Wilcox & Oswalt 2 45
Anthis, Wilcox & Oswalt 4... 50
30-15-9e Unallotted, C. G. Tibbens 1 .. 20
6-19-7e McElroy, Markham & Schoenfeldt 1 40
15-19-7e Manuel, H. W. Skelly 1 ..... dry
32-19-7e Richards, Magnolia Pet. 4 .... dry
5-19-8e Maxey, Bartlett & Mann 2 10
13-19-8e Peters, Burlengame & Sharp 2 200
.. Weaver, The Texas Company 2 95
19-19-8e Miles, Steinberger & Smith 2 gas
12-18-7e Jones, Dixie Oil 1 ..... dry
16-18-7e Coker, Magnolia Pet. 7 55
22-18-7e Wrightsman, R. E. Freeman & Tiger Oil 1-A 8
17-17-7e Tiger, Gibson & Baker 1-A 2
14-17-8e Tucker, Alvard & West 1 65
27-17-8e Bigpond, Inter-Ocean & McCulloch 5 200
22-15-8e Williams, C. G. Tibbens 1 30
2-14-8e Davy, J. W. Henry 4 45
12-14-8e Ponds, Haskell Oil 6 10
16-13-10 Doyle, Holmes et al 1-A 10
30-18-10 Marshall, Madden & Madden 1 dry
1-18-11 Land, Riverland Oil 1-A 576
22-18-11 Bruner, W. J. Cole et al 1 .... gas
6-18-12 Townlot, Day Bros. 2-A ..... dry
19-17-9e Lindsey, Wilcox O. & G. 1... 109
8-17-10 Pemberton, Independent & Turman 1 272
24-17-10 Dawson, Mid-Cont. Pet. 3... 25

Wells completed 68
Production 5123
Dry 19
Gas 4
Gas production 19,500,000

PAWNEE COUNTY

33-23-3e Miller, Watchorn O. & G. 15 gas
29-21-7e Long, Garber & Pulse 1 .... dry
32-21-8e Sigon, Adamson C. O. & G. Co. 7 75
9-20-6e Privett, Magnolia Pet. 4 15
17-20-6e Baker, Magnolia Pet. 3 25
21-20-6e Freeman, Josey Oil 5 175
27-20-9e Mitchell, Suppees & Abeicht 1 dry
10-20-8e McNeal, The Prairie O. & G. 9 100
33-20-5e School land No. 11, Marland & Mid-Cont. Pet. 1 16
3-20-6e McCorskey, Geo. Baker 1 .... gas
19-20-6e White, Champlin Refg. Co. 1 dry
16-20-7e School land, Mid-Cont. Pet. 21.. 70
27-20-7e Alleman, G. Smith 1 15
7-20-8e Childers, Minnehoma & Shelts 2 40
23-20-8e Van Eman, Selby O. & G. 7 10

Wells completed 15
Production 511
Dry 3
Gas 2
Gas production 11,500,000

KAY COUNTY

13-29-2w Olson, Marland Oil 1 ..... dry
17-29-1e Brockhouser, Vernon O. & G. 4 226
8-27-1w Boggs, Tidal Oil 3 75
10-27-1w Moore, Black Gold Oil 3 240
33-25-1w School land, Mid-Cont. Pet. & Marland 10 ..... dry
21-29-1w Duncan, Comar Oil 10 365
5-28-1w Townsite, Braman Oil 3-W... 15
4-27-1w Case, Tolling & Denny 4 30
8-27-1w Jameson, Gypsy Oil 3 68
9-27-1w Geiger, Blackwell O. & G. 8... 123
17-27-1w Boyce "B," Prairie O. & G. 1 gas
19-27-1w Hargraves, Prairie O. & G. 1. gas
10-27-1w Jones, Prairie O. & G. 4 ..... dry
21-29-1w Prioth, Comar Oil 9-W..... 427
17-29-1e Shimp, Ona & Carter 1 370
28-27-1e Buessing, Ballentine et al 1.. 20
1-26-2w Fitzgerald, Marland Oil 2-A.. 172
12-26-2w North, Marland Oil 7 211
33-25-1w School land, Mid-Cont. Pet. & Marland 10 ..... dry
16-29-1w School land, Mid-Cont. Pet. 2.1963
21-29-1w Prioth, Comar Oil 5 6845
5-28-1w Bechtel, Comar Oil 1-W.... 295
3-27-1w Moore, Arkansas Fuel Oil 2.. 50
Dowes, Tidal & Ostot 1 .... dry
16-27-1w Barr, Ostot et al 3 ..... gas
31-28-3e Street, Davis Drlg. Co. 1 .... dry
18-27-1w Johnson, Una Lee Oil 1 16

Wells completed 28
Production 12,570
Dry 5
Gas 3
Gas production 41,500,000

PAYNE COUNTY

13-19-4e Stover, Roxana Pet. 4 ..... dry
14-19-4e Shannon, Magnolia Pet. 1 ... dry
36-19-4e School land, Magnolia Pet. 1. dry
23-18-3e Ostrander, Deep Rock O. & G. 1 25
Shannon, Deep Rock O. & G. 3 65
Shannon, Deep Rock O. & G. 4 gas
1-18-5e Laughlin, Home Gas Co. 2.. dry
14-19-4e Shannon, Prairie O. & G. 1... 30
Erwin, Prairie O. & G. 1 ... 35
Stephenson, Mid-Cont. Pet. 1 dry
9-19-5e Garr, Magnolia Pet. 4 110
26-18-3e Liston, Empire G. & F. 1..... 435
Waitman, T. C. M. Oil 4 980

Wells completed 13
Production 1680
Dry 4
Gas 1
Gas production 33,000,000

LINCOLN COUNTY

35-16-6e Johnson, Madden & J. A. Hull 1 ..... dry
8-15-6e Hopewell, Phillips Pet. 3 .... dry
10-14-5e Patterson, Phillips Pet. 7.... 62
7-13-3e Ewing, Douglas Oil 1 ..... dry
8-14-5e Martin, Prairie O. & G. 1.... dry
23-16-8e Wilson, Dick B. Mason 5.....1200
33-15-5e Temming, Magnolia Pet. 1 ... dry
34-15-5e Sproleder, Magnolia Pet. 3... dry
8-15-6e Owens, Magnolia 1 166
Farp, Mid-Cont. Pet. 5 265
Hopewell, Phillips Pet. 4 477
3-14-5e Belless, Amerada Pet. 3..... 5
4-14-5e Thompson, Magnolia Pet. 6... 20
10-14-5e L. Chapman, Magnolia Pet. 3 100
11-14-5e Roberson, Southwestern Pet. 4 5

Wells completed 15
Production 2300
Dry 6

GARFIELD COUNTY

13-22-4w Welker (N), Sinclair Oil 57... 509
Walker (N), Sinclair Oil 59 ..1000
24-22-4w Belveal, Healdton Pet. 33 22
18-22-3w Schroeder, Roxana Pet. 6-T..1070
Schroeder, Roxana Pet. 7-T... 125
Hartley, Sinclair Oil 6 ..... dry
Hartley, Sinclair Oil 6 ..... dry
Hartley, Sinclair Oil 42 300
19-22-3w Crews, Crews Heirs Oil 19 ... 15
Kisner (W) Sinclair Oil 29 ... 205
6-21-3w Bostwick, Prairie O. & G. 1.. dry
13-22-4w Wolfe, Roxana Pet. 3 ..... dry
Walker (N), Sinclair Oil 44... 350
Walker (N), Sinclair Oil 45 ... 450
Wolfe (N), Sinclair O-1 50 ... 150
Walker (N), Sinclair Oil 53 ... 160
Walker (N), Sinclair Oil 61... 135
36-22-4w Metcher, Sinclair Oil 16-A.... 10
18-22-3w Hartley, Sinclair Oil 43 250
Hartley, Sinclair Oil 49 900
Whitney, Sinclair Oil 6 ..... dry
16-20-4w School land, Mid-Cont. & Marland 1 ..... dry
13-22-4w Wolfe, Roxana Pet. 5-W ..... dry
Denker, Sinclair Oil 6 ..... dry
Walker (N), Sinclair Oil 38 .. 100
Wolfe, Roxana Pet. 4-W ..... dry
Walker, (N), Sinclair Oil 58 805
24-22-4w Belveal, Healdton Pet. 19 .... dry
18-22-3w Schroeder, Roxana et. 1-T .. 64
Hartley, Sinclair Oil 50 100
19-22-3w Kisner (E) Sinclair Oil 17... 25
30-22-3w Burns, Sinclair Oil 1 ..... dry
L. Crews, Sinclair Oil 13 ... 26
12-22-4w Wishard, Prairie Oil & G. 12.. dry

Wells completed 33
Production 7081
Dry 11

GRADY COUNTY

35-5n-8w Dryden, Magnolia Pet. 1 .... gas
27-5n-8w Chandler, American Drlg. Co. 1 ..... gas
34-3n-5w Wham, Carter Oil 1 50
23-5n-8w McCaughtry, Stogner et al 7.. gas
5-3n-5w Gardenhire, Carter Oil 1 55
34-3n-5w B. Mitchell, Magnolia Pet. 1 20
35-3n-5w Hildebrandt, Carter Oil 1 .. 65

Wells completed 7
Production 190
Gas 3
Gas production 95,000,000

STEPHENS AND COTTON COUNTIES

2-2n-5w Green, Carter Oil ....
25-1s-9w P. Russell, Magnolia Pet. 1... 20
12-2n-5w Iserwood, Carter Oil 3 ..... dry
22-1s-8w Warner, Fisher Bros. 2 ..... dry
27-1s-8w Taliaferro, Harry Hanbury 3.. 50
28-1s-8w Taliaferro, McAllester et al 5-A 30
30-1s-8w Brigham, Beard & Cobb 2 40
34-1s-9w Hopper, Carry & Texhoma 1.. dry
35-2n-9w Mercer, Hoffer Oil 1 ..... gas
18-1s-8w Johnson, John Farrett 1-A... 12
28-1s-8w Voss, Guy Brown & McAllister 1 ..... dry
29-1s-8w Stephenson, Magnolia Pet. 2.. dry
33-1s-8w Glass, Magnolia Pet. 5 ..... dry
29-2s-7w Bristow, Womack 1-A ..... gas
27-1s-8w Wilkinson, Pearce & Brown 5.. 12
28-1s-8w Nelson, Winkler & McQueen 2 dry
24-2s-7w Yates, Hawkes & Ware 2.... dry

Wells completed 16
Production 164
Dry 8
Gas 2
Gas production 6,500,000

CARTER COUNTY

18-1s-3w Hardin, Magnolia Pet. 2 75
33-1s-3w Bumpass, Magnolia Pet. 4 416
34-1s-3w Snyder, Humble O. & R. 2.... 267
3-2s-3w Carpenter, Magnolia Pet. 1 .. 150
Pruitt, Wirt Franklin & Prairie 5 225
10-2s-3w Grimes, Wirt Franklin 1 30
7-2s-2w Higgins, Coline Oil 9 20
15-2s-2w Johnson, Magnolia Pet. 2 45
8-3s-2w Watkins, Schermerhorn Oil 4 116
28-5s-1e Clay, Amerada Pet. 21 30
19-1s-3w Winters, Magnolia Pet. 1-A... 15
34-1s-8w Fish, Magnolia Pet. 5 100
3-2s-3w Pruitt, Wirt Franklin & Prairie 6 150
33-1s-3w Lusk, Humble O. & R. 3..... dry
34-1s-3w Snyder, Humble O. & R. 3..... gas
3-2s-3w Liles, Gypsy Oil 2 650
Pruitt, Wirt Franklin & Prairie 2 150
7-2s-2w Watkins, Iowa Oil 2 70
Caughman, Roxana Pet. 1 ... 40
23-2s-2w Noble, Magnolia Pet. 1 ..... dry
22-4s-2w Dillard, Baker & Strawn 12.. dry
13-5s-3w Real, Mickenhiser 1 ..... dry
34-1s-3w Hunsaker Gilmer Oil 2 170
Fish, Magnolia Pet. 6 200
Fish, Magnolia Pet. 7 240
15-2s-3w Carpenter, Mid-Cont. Pet. 1.. dry
8-2s-2w Higgins, Coline Oil 8 ..... gas
1-4s-3e Barnes, Humble O. & G. 1... dry
3-5s-1e Dover, Schermerhorn et al 1 ... dry

Wells completed 29
Production 3069
Dry 7
Gas 2
Gas production 39,000,000

MISCELLANEOUS COUNTIES

Caddo County—
33-6n-9w Fater, Briscoe & Hall 1 .... gas
31-6n-8w Jones, Gladstone O. & R. 2... 60
Beckham County—
24-9n-25w ——, W. H. Sheldon 1... dry
McIntosh County—
2-12-15e McIntosh, Beggs O. & G. 1 gas
Comanche County—
30-2n-9w Hardy, Magnolia Pet. 3 ..... dry
Noble County—
16-21-2w Hoffman, Magnolia Pet. 1 ... dry
15-23-2w Washburn, Sinclair Oil 1 .... dry
15-21-2w Sams, Magnolia & Bu-Vi-Bar 3 75
16-21-2w Hoffman Red Bank Oil 1 ... dry
Jefferson County—
13-4s-4w Hardin, Twin State Oil 1.... dry
8-5s-8w Dunn, Peckham et al 1-A.... dry
18-7s-5w James, Humble O. & R. 1... dry
19-7s-5w Alexander, Humble O. & R. 1 gas
Pontotoc County—
28-5n-5e Copeland, La Salle et al 1... 318
4-3n-6e Hunter, Ada Dev. Co. 1 ..... gas
Garvin County—
27-2n-1w Pool, Empire G. & F. 1 .... dry
Grant County—
22-27-3w Stewart, Western States 4-A.. dry
23-27-3w Martin, Kay O. & G. 3..... gas
27-27-3w Lane, Western States Oil 1 .. gas
Marshall County—
24-5s-5e Arbuckle, United Eight Oil 6 25
21-5s-5e Sacre, Gill et al 1 ..... dry
Love County—
2-6s-1e Carlock, Schermerhorn Oil 1.. dry

Wells completed 22
Production 478
Dry 12
Gas 6
Gas production 84,500,000

OSAGE COUNTY
Rigs

33-29-10 I. T. I. Oil 344.
15-29-11 C. O. Ross & Brown 13.
26-27-5e Mid-Kansas Oil 11.
7-27-6e Phillips Pet. 1, 11, 14.
3-26-6e Marland Oil et al 1.
20-26-6e Phillips Pet. 10, 11.
21-25-6e Sinclair Oil 3.
30-25-8e Lewis Oil 4.
31-25-8e A. G. Oliphant 3.
34-25-11 Devonian Oil 14.
25-24-9e I. T. I. Oil 239.
32-24-9e Peters Pet. 1.
5-23-7e Sinclair Oil 1.
12-23-7e Twin State Oil 3.
14-21-10 Lillystrand et al 4.
Wells Drilling
21-25-6e Prairie O. & G. 12, 13.
2-25-6e Prairie O. & G. 1.
10-27-6e Prairie O. & G. 1.
15-29-10 Blackwell O. & G. 1.
I. T. I. Oil 13.
Keener O. & G. 20.
35-29-11 Osage Dev. (Barnsdall) 42.
31-29-12 R. G. Jennings 4.
7-28-7e Tidal Osage Oil 18.
12-28-11 Delmar Oil 1.
12-27-5e Phillips Pet. 6, 7, 11.
26-27-5e Skelly Oil 7.
7-27-6e Phillips Pet. 6, 10.
17-27-6e Peters Pet. 5.
11-27-10 Pure Oil 89.
10-27-11 C. O. Ross et al 2.
9-26-6e Carter Oil 13.
20-26-6e Phillips Pet. 12.
21-26-6e Lewis Oil 8, 9, 10.
Phillips Pet. 1, 2, 3.
36-25-5e Gypsy Oil 1.
29-25-8e Lewis Oil 11.
31-25-8e Wrightsman et al 3.
22-25-11 I. T. I. Oil 345.
5-24-8e Amerada Pet. 1.
Douglas Oil 1.
6-24-8e Carter Oil 2, 3.
C. F. Lake et al 1, 2.
13-24-8e The Texas Co. 2.
19-24-8e Atlantic O. P. 1.
21-24-8e Marland Oil 1.
33-24-8e Continental Oil 22.
1-23-8e Tidal Osage Oil 1, 2, 3.
12-23-8e Peters Pet. 10, 11.
Twin State Oil 1, 2.
6-23-9e Comar Oil 1.
7-23-9e Continental & Prairie 1, 4.
8-23-10 Adium et al 2.
17-23-10 New England O. & P. L. 1.
28-23-10 Mid-Cont. Pet. 1.
25-22-7e Pure Oil 4.
35-22-8e Skelly & Moore 1.
8-22-9e Atlantic O. P. 1.
22-22-9e H. E. Bertenshaw 3.
33-22-9e Skelly Oil 1.
18-22-10 Mid Co. Pet. 16.
28-22-12 Kanupp et al 1.
2-21-8e Barnsdall Oil 3.
24-21-9e Devonian Oil 1.
24-21-9e Warnotte Oil 1.
16-21-12 Commercial Drlg. Co. 9.
19-21-12 Kewanee O. & G. 10.
22-21-12 Tidal Oil 3.
30-21-12 Elliott & Smith 26.
24-20-11 Riverland & Inter-Ocean Oil 1.
31-20-11 Sand Springs Home 2.
35-20-11 Devonian Oil et al 1.
29-20-12 Winona Oil 8.
Shut Down
2-27-5e Skelly Oil 3.
10-25-8e Carter Oil 1.
28-24-8e Axelrod et al 2.
21-23-8e Barnsdall Oil 1.
Beacon Oil 25.
11-23-11 A. H. Pettigraves 5.
36-22-8e Mid-Kansas Oil 2.
5-21-12 Osage & Sohs 6.
Rigs, 18; wells drilling, 81; total 99.

TULSA COUNTY
Rigs

9-19-11 Gates, Sand Springs Home 1.
13-19-11 London, Sand Springs Home 5.
23-19-11 Unallotted, Sand Springs Home 1.
1-17-13 Taylor, E. A. Hawley 1.
Wells Drilling
17-19-11 Smith, Hutt & Hutt 6.
19-19-11 Littleton, Commercial Drlg. Co. 5.
23-19-11 Arch. Sand Springs Home 1.
34-19-11 Anderson, Riverland Oil 2.
35-19-11 Inchoe, A. A. Thornton 1.
29-19-12 Unallotted, Continental Oil 3.
6-17-13 Oswalt, Hutt et al 3-A.
22-17-13 Fox, Franchott & Mid-Cont. Pet. 1-A.
12-17-14 McIntosh, W. O. Dickenson 1.
3-16-12 Sanderson, S. W. Anthony 2.
13-16-12 Doneghy, Winemiller et al 16.
Shut Down
9-19-14 Berryhill, Ora Upp et al 1.
10-19-14 Norter, Linden et al 1.
1-18-12 Barnett, Sherman et al 1-A.
16-18-13 Rentie, L. C. Hivick 3.
13-16-12 Unallotted, Winemiller et al 1.
Rigs, 4; wells drilling, 16; total, 20.

OKMULGEE COUNTY
Rigs

24-16-12 Tiger, Devonian Oil 8.
26-16-12 Lowe, Baker et al 1.
17-15-11 Gibson, Shaffer O. & R. 8.
23-15-11 Bruner, Le Bean et al 1.
9-15-12 Forty-Four, C. L. McMahon 1.
16-15-12 Marsey, T. A. Johnson 1.
23-15-12 Peloche, Devonian Oil 3.
23-13-11 Murrell, Barnsdall Oil 8.
7-11-12 Holmes, Moffitt et al 4.
32-11-12 Ashbury, Colorado O. & G. 2.
15-15-14 M. Francis, Selby, Hyre & Layne 1-A.
16-15-14 McKinney, F. Sheedy 4.
7-14-13 Lovey, Kingwood Oil 1.
32-14-13 Checote, Vincent & Stansberry 1.
22-14-14 Wright, Clarion Oil 8.
23-14-14 Corbray, C. T. Smith 9.
27-14-14 Flint, E. J. Lambert 4.
18-14-15 Rentie, A. F. Boone et al 4.
Rentie, Gallagher 3.
35-13-14 Wilson, W. M. Hewitt 5.
31-11-13 Han, G. V. Luttes 1.
Wells Drilling
6-12-12 Wood, Prairie O. & G. 1.
20-16-11 Ponse, Erwin et al 1.
33-16-11 Simms, Barnsdall Oil 1
34-16-11 Grayson, Iron Mtn. Oil 3.
20-16-12 Fee, Crider 1.
24-16-14 Grayson, W. H. Elson & Carter Oil 1.
Lowery, E. J. Lambert 1.
27-16-14 Peters, Harsha & Delaney 4.
23-15-11 Bruner, Le Bean et al 5.
5-15-12 Hickory, Henry Oil 1-A.
8-15-12 Doneghy, J. J. Shock et al 1.
10-15-12 Bigpond, T. A. Johnson 1-A.
23-15-12 Peloche, Devonian Oil 2.
24-15-12 Blair, C. E. Campbell 2.
28-15-12 Hill, Jordan, Thompson et al 5.
35-15-12 Claunch, W. E. Hammon et al 3.
7-14-11 Farmer, Holmes et al 1.
24-14-11 Sango, Abbott & Dillard & Carter Oil 1.
4-14-12 Adams, Devonian Oil 1-A.
Smith, Campbell et al 1.
11-14-12 Smith, Abbott, Dillard & Carter Oil 1-A.
19-14-12 Filly, J. M. Kessler 1.
25-14-12 Unallotted, J. H. Rebold 1.
25-13-11 Lewis, J. A. Swindler & Sons 8.
28-13-11 Jones, The Texas Co. 2.
32-13-11 Thomas, Denver P. & R. 8.
33-13-11 Roberts, Radcliff Oil 1-A.
8-13-12 Morton, H. C. Marsey 8.
11-13-12 Budleman, King & Jackson 3.
7-12-12 Wilson, Morton & Co. 7.
4-11-12 Hawkins, Roy Parkhill 1.
Hawkins, Eagle Picher 1.
5-11-12 Jackson, C. O. Buckles 17.
17-15-13 Gibson, A. E. Kirkland & Sons 3.
3-15-14 Rentie, Acta Oil 1.
Kelly, W. B. Pine 1.
Kelly, Transcontinental Oil 1.
15-15-14 M. Francis, McCulloch Oil 2-A.
16-15-14 McKinney, C. L. McMahon 1.
Bruner, The Texas Co. 5, 6, 7, 8, 9, 10.
21-15-14 Garnett, McCulloch Oil 5, 6, 7
Garnett, The Texas Co. 14, 15.
22-15-14 Severs, Twin State Oil 5.
24-14-13 Drew, X-Ray Oil 3.
1-14-14 Harris, E. A. Hutchinson 2.
9-14-14 Stevens, Future Dev. Co. 5.
15-14-14 Colbert, Drew-Beams 4.
16-14-14 Love, F. Mayer & Misener 9.
23-14-14 Corbray, M. Beard 14.
32-14-14 Rentie, Gardner et al 2.
Rentie, X-Ray Oil 3.
35-14-14 Anderson, J. L. Selby 33.
8-14-15 Anderson, J. L. Powell 2.
32-14-15 Dumit, J. R. Parks 5.
10-12-13 Manuel, W. B. Pine 4.
17-12-13 Burgess, W. B. Pine 1.
4-11-13 Hawkins, Tiger Mtn. Oil 1
Shut Down
21-16-14 Rowe, Atlas Oil 3.
3-13-11 Anderson, Vincent et al 1.
3-11-12 Calloway, B. Martin et al 1.
32-11-12 Ashbury, Colorado O. & G. 1.
7-15-14 Brown, E. B. Grubbs 1.
8-15-14 Bowe, Hennessey et al 3.
19-14-13 Berryhill, McCulloch Oil 9.
9-14-14 Stevens, W. A. George 12.
21-13-11 Dunn, E. J. Lambert 1-A.
28-13-15 Hutton, O. T. Stout et al 2.
13-11-13 Kanard, B. Morgan 6.
Rigs, 21; wells drilling, 76; total, 97.

SEMINOLE COUNTY
Rigs

27-9n-6e Strother, Prairie O. & G. 1.
34-10-6e Wash urn, Prairie O. & G. 1.
33-11-8e Pierce, Sinclair Oil 10.
34-10-6e Stewart, Carter Oil 2, 4.
Grayson, Mid-Cont. Pet. 3.
35-10-6e Harjo, Wrightsman Oil 1.
31-10-7e Harjo, Carter Oil 1.
11-10-8e Hill, Sinclair Oil 2.
2-9n-6e Williams, Magnolia Pet. 1
3-9n-6e Frazier, Carter Oil 1.
4-9n-6e Cluck, Wilcox O. & G. 1
23-9n-6e Grisso, Carter Oil 1.
Harjo, Tidal Oil 1, 2.
24-9n-6e James, Amerada Pet. 2.
Carter, Barnsdall Oil 5.
Carter, Carter Oil 3.
James, I. T. I. Oil 6.
Pahardy, Mid-Continent Pet. 3.
Carter, Tidal Oil 2.
25-9n-6e Noble, Empire G. & F. 1.
Tayche, Tidal Oil 2.
26-9n-6e Jones, Independent & Inter-Ocean 3.
Lewis, Pure Oil 4, 5, 6, 7.
Grisso, Tidal Oil 4, 5, 6.
34-9n-6e Jones, Barnsdall Oil 1.
36-9n-6e Frazee, Gypsy Oil 1.
7-9n-8e McDaniel, Plover Drlg. Co. 3.
5-8n-6e Seminole, Gypsy Oil 1.
31-8n-8e Sa'nda, W. R. Ramsey 6.
32-8n-8e Parker, Dixie Oil 3.
Long, Independent & Continental 4.
Jones, Magnolia Pet. 5.
Jones, Shaffer O. & R. 8.
22-7n-6e Hotulka, Barnsdall Oil 1.
33-10-6e Kinkade, Prairie O. & G. 4.
Wells Drilling
33-10-6e Kinkade, Prairie O. & G. 2, 3.
25-9n-6e Gross, Prairie O. & G. 1.
33-11-8e Pierce, Mutual & Continental 4.
Pierce, Continental Oil 9.
26-10-6e Harjoche, Carter Oil 1.
28-10-6e Baker, Amerada Pet. 1.
33-10-6e Youngblood, Searight et al 3, 4.
34-10-6e Stewart, Carter Oil 1.
Grayson, Mid-Cont. Pet. 2.
35-10-6e Harrison, Carter Oil 1.
8-10-8e Deer, Devonian Oil 2.
Willis, Gypsy Oil 8.
11-10-8e King, Gypsy Oil 1.
10-9n-5e Sullivan, Barnsdall Oil 1.
Lena, Magnolia Pet. 1.
Johnson, The Texas Co. 1.
11-9n-5e Sparks, Magnolia Pet. 1.
14-9n-5e Winton, Barnsdall Oil 1.
4-9n-6e Davis, Carter Oil 1.
10-9n-6e Noble, Superior Oil 1.
14-9n-6e Rentie, Mid-Cont. Pet. 1.
15-9n-6e Johnson, Gypsy Oil 1.
23-9n-6e Rentie, Amerada Pet. 1.
Carter, Carter Oil 1.
24-9n-6e Carter, Barnsdall Oil 3, 4.
Carter, Carter Oil 1, 2.
Carter, Gypsy Oil 1, 2.
James, I. T. I. Oil 2, 7.
Pahardy, Mid-Cont. Pet. 2, 4.
Mayhue, Tidal Oil 3, 4.
Carter, Tidal Oil 4.
25-9n-6e Wilkins, Mid-Kansas Oil 1.
Tayche, Tidal Oil 1.
26-9n-6e Grisso, Gypsy Oil 1, 2, 3.
Wolfe, Gypsy Oil 1, 2.
Grisso, Independent and Garland 2, 3, 4.
Jones, Independent and Inter-Ocean 1, 2.
Bowlegs, I. T. I. Oil 1, 2, 3.
Lewis, Pure Oil 1, 2, 3.
Grisso, Tidal Oil 1, 2, 3.
34-9n-6e Strothers, Carter Oil 1.
35-9n-6e Cudjo, Superior Oil 1.
Cudjo "A", Sinclair Oil 1.

Cudjo "B", Sinclair Oil 1.
Franks, T. B. Slick 1.
15-9n-7e Jonah, Pure Oil 1.
17-9n-7e Warrior, Sinclair Oil 1.
18-9n-7e Drewry, Magnolia Pet. 1.
20-9n-7e Pepper, Magnolia Pet. 1.
21-9n-7e Island, Gypsy-Phillips Pet. 1.
7-9n-8e McDaniel, Independent O. & G. 2.
Kidd, Independent, Holm & Jarvis 1.
Cully, Mid-Continent Pet et al 2.
McDaniel, Plover Drlg. Co. 4.
Alexander, T. B. Slick 2, 3.
8-9n-8e Buckner, Jarvis, Holm and Atlantic 1.
18-9n-8e Bowlegs, Gypsy Oil 2.
Peters, Southwestern Pet. 3.
Smith, Winona Oil 2.
13-8n-6e Harjo, T. T. I. Oil 1.
15-8n-6e Walker, Gypsy Oil 1.
Goforth, I. T. I. Oil 2.
Livingston, I. T. I. Oil 1.
17-8n-6e Strother, Magnolia Pet. 1.
16-8n-6e Sewell, I. T. I. Oil 1.
31-8n-6e Pullatka, Superior Oil 1.
33-8n-6e Brown, Gypsy Oil 1.
19-8n-7e Davis, Carter Oil 1.
14-8n-7e Carolina, Magnolia Pet. 5.
Norval, Magnolia Pet. 2.
Jackson, T. B. Slick 4.
23-8n-7e Hanning, Magnolia Pet. 3.
25-8n-7e Carter, Magnolia Pet. 1.
26-8n-7e Ramsey-Jackson, Magnolia Pet. 1.
28-8n-7e Knight, Magnolia Pet. 1.
15-8n-8e Sewell, Champlin & Bass 1.
27-8n-8e Carolina, Magnolia Pet. 1.
29-8n-8e Walker, Magnolia Pet. 3.
31-8n-8e Willis, Boggs & Sykes 6.
Amos, W. R. Ramsey 6.
Salinda, W. R. Ramsey 7.
32-8n-8e Grayson, Amerada Pet. 2, 4.
Long "B", Dixie Oil 2, 4.
Long "A", Dixie Oil 4.
Long, Independent and Continental 2, 3.
33-8n-8e Scott, Magnolia Pet. 3, 4.
3-7n-6e Litka, Empire G. & F. 1.
7-7n-6e Litka, I. T. I. Oil 1.
22-7n-7e Jackson, Magnolia Pet. 1.
Davis, Transcontinental Oil 2.
5-7n-8e Skinner, Magnolia Pet. 9, 11.
6-7n-8e Knight "C", Dixie Oil 4.
Carolina, Homaokla Oil 3, 5, 7.
Gilstrap, Magnolia Pet. 2.
Hawkins, Magnolia Pet. 2.
Harbor, Magnolia Pet. 2.
Davis, Magnolia Pet. 5.
5-6n-7e Vierson, Magnolia Pet. 1.
6-6n-8e Reed, Heffer Oil 1.
24-5n-5e Nitley, Riverside O. & R. and Kinney 1.
Shut Down
1-9n-5e Sango, F. J. Searight 1.
34-9n-6e Cudjo, Amerada Pet. 1.
14-8n-7e Rodman, Magnolia Pet. 1.
Jackson, T. B. Slick 3.
9-8n-8e Miller, T. Atkins et al 1.
32-8n-8e Grayson, Amerada Pet. 1.
32-8n-8e Grayson, Amerada Pet. 3.
1-7n-6e Dickson, I. T. I. Oil 1.
5-7n-8e Simon, Independent and Atlantic 4.
6-7n-8e Carolina, Homaokla Oil 6.
33-6n-6e Christy, Palmetto Oil 1.
Rigs, 42; wells drilling, 139; total, 281.

OKFUSKEE COUNTY
Rigs
18-13-8e Ford, Amerada and Barnsdall 1.
7-13-10 Micco, L. E. Cooper & R. D. Connelly 1.
25-12-9e Leedy, T. A. Johnson 1.
2-12-11 Sullivan, J. J. Deaner 1.
3-12-11 Morgan, Barnsdall Oil 4, 5.
Morgan, McMahon Oil 2.
8-12-11 Scott, J. M. Kessler 1.
10-12-11 Randall, Barnsdall Oil 4.
35-11-9e Wind, Dilcrease Oil 2.
4-11-10 Stidham, Moose & Daniels 1.
10-12-11 Hooks, Prairie O. & G. 1.
16-13-8e Harjo, Magnolia Pet. 1.
Wells Drilling
13-13-8e Wilson, Peerless O. & R. 1.
33-13-7e Byrd, Sinclair Oil 1.
17-12-7e Hennecchee, Mid-Kansas O. & G. 1-A.
14-13-9e Callahan, Darby Pet. 2.
17-13-10 Manwarring, Darby Pet. et al 1.
12-12-10 Cinda, Independent O. & G. 1.
17-12-10 Harrison, Amerada Pet. 2.
13-12-11 Sugar, Independent O. & G. 13.
32-12-11 Hulsey, Josey Oil 4.
33-12-11 McCoy, Josey Oil 13, 15, 16.
3-11-9e Henderson, Lenox Oil 1.
35-11-9e Wind, Atlantic O. P. 1.
Harjo, Gypsy Oil 2.
36-11-9e Mecco, Sinclair Oil 2.
3-11-10 Stidham, Link Oil 1.
14-11-10 Buckley, Terrien & Balliere 1-A.
14-11-11 Ingram, Champlin Refg. 1.
15-11-11 Jacobs, Champlin Refg. 4.
19-11-11 Barnett, Riverland Oil 1.
23-11-11 Unallotted, Carter Oil 1.
Likowskie, J. J. Deaner 1-A.
Likowskie, R. A. Ravel 1-A.
25-11-11 Barnett, Carter Oil 2.
2-10-9e Deer, E. L. Robinson 1.
16-10-9e Bruner, Independent O. & G. 1.
17-10-9e Carolina, McCulloch Oil 1.
33-10-9e Barnett, Arkansas Fuel Oil 2.
36-10-9e Dacon, Amerada Pet. 1.
15-10-10 Canard, Robert Co. 1.
26-10-10 Butler, Schrock & Jameson 1.
4-10-11 Barnett, R. W. Vierson et al 1.
18-10-11 Simmer, Amerada Pet. 1.
19-10-11 Lockhart, Morgan, Flynn & Roxana 1.
21-10-11 Barnett, Lou Umburn & Future Co. 1.
7-10-12 Bird Creek, Eagle-Picher Lead Co. 3.
26-11-9e Collins, Prairie O. & G. 1
Shut Down
8-12-10 Yarbola, Blakely et al 1.
23-12-10 Harjo, Blakely et al 1.
10-12-11 Randall, Barnsdall Oil 3.
28-12-11 Unallotted, Josey Oil 1.
36-11-11 Holmes, W. L. Umburn 1.
11-10-11 Hill, Lou Umburn 1.
15-10-12 Starr, Evans & Starr 1.
Rigs, 13; wells drilling, 45; total, 58.

HUGHES COUNTY
Rigs
8-9n-8e Ada, Plover Drlg. Co. 1.
13-8n-9e Long, Noble O. & R. 1.
5-7n-8e Frederick, Amerada Pet. 1-A.
1-8n-8e McAllister, Prairie O. & G. 1.
Wells Drilling
13-9n-8e Paldon, Johnson, Ashe et al 1.
24-9n-8e Culver, T. Atkins et al 1.
3-9n-9e Alexander, Mid-Continent Pet. 13
4-9n-9e Tiger, Foster Oil 3.
Alexander, Papoose Oil 10.
26-9n-9e Davis, Independent O. & G. 3.
Harjo, Transcontinental Oil 6, 10.
27-9n-9e Long, Gypsy Oil 3.
35-9n-9e Harjo, Transcontinental Oil 2.
10-9n-10 Ana Lee, Detrick et al 1.
24-9n-10 Barnett, Roxana Pet. 1.
3-9n-11 Sutton "B", Tidal-Osage Oil 9.
3-8n-9e Harjo, Champlin & Bass 1.
10-8n-9e Harnage, Sands Pet. 1.
28-8n-9e Reed, Independent & Margay 1.
17-8n-10 Carter, Robinson & Amerada Pet.
18-8n-10 Diamond "C", Dixie Oil 1.
21-8n-10 Hamphill, Burk-Greis Oil 1.
4-8n-11 Wallace, Sorry & Schwartz 1.
32-8n-11 Bear, Johnson, Ashe et al 1.
5-7n-8e Frederick, Amerada Pet. 2-A.
Frederick, Amerada Pet. 5, 10, 12.
M. Garner, Dixie Oil 2, 9, 7, 8.
Garner, Humble O. & R. 1, 2.
Foster, Independent & Sinclair 1.
Frederick, Magnolia Pet. 1, 2.
Garner, Magnolia Pet. 2.
J. D. Garner, Magnolia Pet. 1.
14-7n-8e Jacobs, W. R. Ramsey 2.
29-7n-8e Harjo, Magnolia Pet. 1.
2-6n-8e Hardage, Humble O. & R. 1.
Shut Down
1-9n-9e Bruner, Independent & Atlantic 4.
18-9n-9e Oliphant, Magnolia Pet. 1.
26-9n-9e Proctor, Independent & Darby Pet. 1.
Harjo, Transcontinental Oil 8.
27-9n-9e Lond, Gypsy Oil 2.
22-8n-9e Long, McCullouch Oil 1.
28-8n-9e Meadors, Magnolia Pet. 1.
29-8n-9e McCray, Magnolia Pet. 1.
18-8n-10 Diamond "A", Dixie Oil 2.
Diamond "C", Dixie Oil 3.
8-6n-10 Kite, Walton, Snyder & Marshall 1.
Rigs, 4; wells drilling, 50; total, 54.

MUSKOGEE AND WAGONER COUNTIES
Rigs
31-17-17 Peters, Mitchell Oil 1.
29-15-15 Vanderslice, E. L. Kisler 3.
28-14-16 Brown, Judy-Ogg Oil 1-A.
16-14-19 Cympton, C. M. Bradley 1.
27-13-19 Louther, Herbert Oil 1.
Wells Drilling
28-18-17e Childers, R. M. Lear 1.
11-17-16 Robbins, R. E. Perry et al 2.
21-17-16 Childers, Severe Oil 3.
26-17-16 Drew, W. B. Pine 4.
26-17-16 Bruner, M. E. Johnson 1.
20-17-17 Perryman, J. F. Blackwood et al 4.
11-16-16 Grayson, Wilson & Tillman 1.
21-16-16 Boles, Mitchell Oil 1.
35-16-17 Marshall, Denton & Marshall 1.
19-16-19 Nave, Mission Oil and F. W. Isett 1.
28-15-15 Manuel, Link Oil 1.
17-15-17 Warrior, W. R. Sommerville 1.
1-14-17 Sango, T-O Pet. Co. 7.
18-14-17 James, Peterson et al 6.
28-14-17 Dean, E. C. Dooley et al 2.
2-14-19 Wade, C. M. Bradley et al 1.
5-14-19 Crittenden, C. M. Bradley et al 2.
3-11-20 Shoemade, D. C. Lampton 1.
Shut Down
19-17-16 Bradley, J. Nealy 3.
30-16-15 Grayson, Montgomery et al 9.
29-15-15 Morris, Cory & Anders 1.
18-14-19 Reid, C. M. Bradley 1.
20-13-16 London, Boomer Oil 1.
Rigs, 5; wells drilling, 23; total, 28.

CREEK COUNTY
Rigs
5-19-8e Noble, Bartlett & Mann 2.
13-19-8e Ross, Gled Oil 5.
8-18-7e Klein, Silurian Oil 27.
5-18-8e Perryman, New England O. & P. L. 1.
14-17-7e Artuser, Mid-Continent Pet. 10.
15-17-7e Stewart, Mid-Continent Pet. 27.
Stewart, Mid-Continent Pet. 28.
21-17-8e Scruggs, Burk-Greis & Darby Pet. 2.
Scruggs, Devonian Oil 1.
Kano, The Texas Company and Transcontinental 1.
22-17-8e Johnson, Savoy Oil 7.
21-15-7e Hayne, Barnsdall Oil 1.
20-15-8e Beaver, Skelly Oil 1-A.
11-14-8e White, Aztec Oil 4.
1-19-9e Tutrell, National Refg. Co. 1
7-19-9e Tahkaney, Dixie Oil 1.
6-19-10 McKee, Superior Oil 1.
4-18-11 Lively, McCulloch Oil 1-A.
9-18-11 Jack, Twin State Oil 8.
1-17-9e Drew, McCulloch Oil 1.
3-17-9e Chisholm, Harwell Oil 2.
3-17-9e Simmons, The Texas Company 5.
2-17-10 Self, Arnold et al 1.
5-17-10 Francis, Dixie Oil 1.
Francis, Independent O. & G. 1.
8-17-10 Pemberton, W. S. Turman 1.
13-17-10 Brink, Ted-Ray Oil 1.
16-17-10 Thomas, O. P. Thomas 1.
24-17-10 Dawton, J. H. Wright 13.
Tahkaney, H. W. Wright 9, 11.
32-17-10 Yellowhead, Skelly Oil 2.
3-17-11 Fife, S. J. Smith 4.
30-17-11 Garald & Nichols, M. W. Evans 1.
21-16-9e Hendrickson, Jackson & Wise 3.
32-16-9e Vaugh, Graham Oil 1.
36-15-9e Unallotted, C. G. Tibbens 32.
26-15-10 Rogers, Scruggs & Carter Oil 1.
20-14-10 Scott, C. F. Noble 1.
17-19-10 Unallotted, Craig et al 1-A.
7-16-9e Sango, W. R. Davis 1.
Wells Drilling
21-17-7e Litchfield, Prairie O. & G. 40.
6-18-7e Rector, Prairie O. & G. 55.
3-19-8e Walker, Mannford Dev. Co. 1.
13-19-8e Peters, Gled Oil 1.
Ross, Gled Oil 4, 5.
Peters, Burlengane & Sharp 7, 10.
Lowe, J. B. Grieves 6.
14-19-8e Miller, Devonian Oil 6.
19-19-8e Smiley, Steinberger & Smith 2
24-19-8e Grayson, Grieves Oil 1.
1-18-7e Jack, Burnett et al 1.
9-18-7e Atkins, Sand Springs Home 26.
Rector, Riverside O. & R. 2.
8-18-7e Yarhola, Riverside O. & R. 1
18-18-7e Fisher, Shaffer O. & R. 13.
26-18-7e Jones, Shaffer O. & R. 1.
32-18-7e Derrisaw, Magnolia Pet. 3.
Drumright, Magnolia Pet. 1, 19.
4-17-7e Richards, Tidal Oil 20.
9-17-7e Wiley, Magnolia Pet. 1.
15-17-7e Stewart, Mid-Continent Pet. 2, 3, 26.
22-17-7e Fife, Tidal Oil 4.
11-17-8e Wyatt, Bu-Vi-Bar Pet. 1.
16-17-8e Morrison, Shaffer O. & R. 1.
20-17-8e Scruggs, Devonian & Billingslea 1.
———, Transcontinental Oil 1.
21-17-8e Scruggs, Burk-Greis & Darby Pet 1.
22-17-8e Mitchell, Barnsdall Oil 4.
22-17-8e Johnson, Savoy Oil 6.
Mitchell, Transcontental Oil 2.
23-17-8e Walker, Savoy Oil 3.
26-17-8e Cobb, Barnsdall Oil 3.
27-17-8e Bruner, Southwestern Pet. 3
6-15-7e Wattie, Magnolia Pet. 1.
Steele, Pure Oil 2.
36-15-7e Tiger, R. J. Jennings 1.
Bigpond, Dixon Pet. 1.
25-15-8e Herrod, C. G. Tibbens 2.
30-15-8e Benjamin, Lima O. & G. 2.
35-15-8e Hill, C. G. Tibbens 3.
12-14-8e Ponds, Gypsy Oil 16.
12-14-8e McKan, Skelly Oil 15.
17-14-8e Cooper, Shaffer O. & G. 1
26-14-8e Johnson, C. G. Tibbens 12.
30-14-8e McGilbray, Black Gold Oil 1-A
3-19-9e Morgan, Holmes et al 4.
17-19-9e Murrell, Mid-West & Gulf 2.
18-19-9e Smith, Roxana Pet. 1.
Clark, Roxana Pet. 1.
22-19-10 Timothy, Holmes et al 5.
33-19-10 Kiefer, Bu-Vi-Bar Pet. 1.
8-18-10 Fields, H. Sparks et al 1.
1-18-11 Richards, Gypsy Oil 13.
15-18-11 Snow, Redgraves et al 1.
4-18-12 Saunders, Devonian Oil 1.
6-18-12 Bigpond, Regal Oil 29.
Sango, Sunray Oil 8.
9-18-12 Yellowhead, C. G. Tibbens 9.
3-17-9e Chisholm, Harwell et al 1.
Simmons, The Texas Company 4.
10-17-9e Bruce, Roxana Pet. 2.
14-17-9e Smith, G. & M. Oil 1.
21-17-9e Charcotenne, Wood & Farren 4.
22-17-9e Harjoche, T. P. C. & O. Co. 2.
Walker, Westland Oil 2.
31-17-9e Marshall, Gypsy Oil 1.
4-17-10 S. Johns, McCulloch Oil 1.
11-17-10 Smith, O. M. Irelan 1.
13-17-10 Joconton, McCulloch Oil 1.
Fulson, Pontiac Oil 1.
16-17-10 Fulson, Chief Drlg. Co. et al 1.
20-17-10 Wiley, F. C. Adams 2.
Unallotted, Jackson & Wise 1-A.
23-17-10 Holden, Kirshner 3.
24-17-10 Bucktrot, Pioneer Pet. 9, 10.
Tahkaney, H. W. Wright 10, 11.
32-17-10 Yellowhead, Skelly Oil 1.
8-17-11 Freeman, O. M. Irelan et al 7, 8.
16-17-11 Broadnox, Misener & Reesman 1.
17-17-11 Wasoche, Shaffer O. & R. 6.
34-17-11 Tiger, Overless et al 1-A.
21-16-9e Hendrickson, Lover & Myers 1-A
36-16-9e Allen, Williams & Bell 1.
2-16-10 Scott, Kingsmith Refg. 16.
12-16-10 Hughes, Shaffer O. & R. 1.
12-16-11 Ricks, H. W. Bartlett 2.
14-16-11 Cowen, J. A. Porter et al 1.
9-16-12 Penoke, Turner & Turner 4.
20-15-9e Montgomery, C. G. Tibbens 1
30-15-9e Unallotted, C. G. Tibbens 31, 33.
32-15-9e Drake, C. G. Tibbens 1.
1-15-10 Ashbury, H. C. Wilson 1.
6-15-10 Allen, Rolland Oil 1.
8-14-9e Barnett, C. G. Tibbens 1.
25-14-9e Tey, Wood Oil 1.
36-14-9e Lampkins, Wood Oil 1.
9-14-10 Tiger, Johnson & Ashe et al 1.
Kimble & Reading, McMann Oil 1.
16-14-10 Bear, Atlantic O. & P. Co. 1-A, 2.
Reynolds, Atlantic O. & P. Co. 1.
Tiger, Atlantic O. & P. Co. 2
20-14-10 Knight, Hall & Donnelly 2.
Scott, Wilcox O. & G. 13.
25-14-10 Settle, Chief Drlg. Co. and Independent O. & G. 1.
32-14-10 Unallotted, Empire G. & F. 2
32-14-10 Walker, Mid-Continent Pet. 6.
Jones, T. B. Slick 1.
Doyle, T. B. Slick 1.
1-16-11 Anthis, Wilcox O. & G. 6.
Shut Down
30-18-8e Holman, J. C. Walters et al 1.
11-17-8e Watson, Bu-Vi-Bar Pet. 1.
14-17-8e Fry, Alvard & West 4.
19-18-9e Sherman, H. U. Bartlett 1.
27-18-10 Allen, Vaughn & Wheeler 1
14-18-11 Tiger, O. N. White 1-A.
18-18-11 Bigner, Posey Short et al 2.
32-18-11 Frews, Cross et al 1.
5-18-12 Sizemore, Henson 2.
33-16-9e Vaughn, O'Rourke et al 2.
11-14-10 Webb, H. George et al 1.
Rigs, 41; wells drilling, 130; total, 171.

PAWNEE COUNTY
Rigs
10-22-3e Tucker, Magnolia Pet. 1.
22-23-4e Zoldoskie, Donahue & Carter Oil 4.
23-21-7e Bailey, J. H. Markham, Jr. 6.
31-21-8e Havercamp, J. B. Grieves 5.
32-21-8e Bigner, Ramson C. O. & G. 8.
9-20-6e S. M. Fugate, Magnolia Pet. 3.
10-20-6e Wilson, Privett Drlg. Co. 1.
21-20-6e Freeman, Josey Oil 6.
36-20-6e School land, Riverside O. & R. 1.
16-20-7e School land, Mid-Continent Pet. 23.
27-20-7e Reigle, Smith & Steinberger 1-A.
3-20-8e Arnold, Tidal Oil 10.
7-20-8e Childers, Minnehoma & Shelts 4.
10-20-8e Mullendore, Sinclair O. & G. 12.
Wells Drilling
30-23-3e Gilbert, Magnolia Pet. 1.
9-22-3e Arkeetta, Magnolia Pet. 3.
27-23-4e Brian, J. L. Donahue 1-A.
16-22-4e School land, Magnolia Pet. 1.
26-22-5e Redd, Bu-Vi-Bar Pet. 1.
35-22-6e Miller, Devonian Oil 1.
Dobson, Devonian Oil 2.
1-21-6e Bryan, Independent O. & G. 1.
16-21-6e School land, 761 Ranch Oil 1.
24-21-7e Mullendore, Minnehoma Oil 8, 9.
6-20-5e Babcock, Stacey & Vaughn 1.
20-20-5e Goodchief, Champlin Refg. Co. 1.
28-20-5e Williamson, Magnolia Pet. 1.
32-20-5e Berry, Magnolia Pet. 2.
33-20-6e Pollock, Gypsy Oil 3, 4.
School land "F", Marland & Mid-Continent Pet. 1.
School land "Miner", Marland & Mid-Continent Pet. 1.
School land "M", Marland & Mid-Continent Pet. 2.
15-20-6e Platt, Shaffer O. & R. 2.
16-20-6e Burgman, Jim Glenn Oil 4.
School land, Magnolia Pet. 5.
22-20-6e Lesher, Fern Oil 3.
34-20-7e Allender, Ryan Consolidated Oil 4.
4-20-8e Armstrong, Gypsy Oil 1.
10-20-8e Brentenall, Sinclair Oil 17.
Mullendore, Sinclair Oil 11.
24-20-8e Wasson, Southwestern Oil Fields Corp. 19.
18-20-10 Black, R. E. Kennedy 1.
Shut Down
35-22-6e Hays, Devonian Oil 1.
28-20-6e White, Davis Drlg. Co. 1.
4-20-7e Townsite, W. A. McCabe et al 1
11-20-7e Rogers, Block & Carnahan 1-A.
Rigs, 14; wells drilling, 34; total, 48.

KAY COUNTY
Rigs
20-29-1w Day, The Texas Company 5.
21-29-1w Pribolb, Comar Oil 11-W.
Harwell, Comar Oil 5-W.
17-29-1e Dickerson, Marland Oil 3.
28-28-2e Huddleston, John Stark et al 1
20-29-1e Shinn, Carter Oil 1.
Wells Drilling
10-27-1w Jones, Prairie O. & G. 5.
1-26-2w Smith "A", Prairie O. & G. 7.
18-29-3w Atkinson, Mississippi Valley Oil 1
15-29-1w Hanzel, Harris & Hahn 1.
16-29-1w Brown, Comar Oil 1-W.
20-29-1w Day, The Texas Company 2, 4.
Day, Comar Oil 2.
21-29-1w Duncan, Comar Oil 12.
28-29-1w Bixby, Comar Oil 1.
29-29-1w Judd, Comar Oil 1.
16-29-1e School land No. 11, Wentz Oil 2.
17-29-1e Brookholder, Vernon O. & G. 2
Dickerson, Marland Oil 2.
20-29-1e Bradley, Carter Oil 1, 2.
25-29-1e Smith, Strosnyder et al 1.
30-29-1e Hennessey, Junction Oil 2.
4-28-2w Wood, Moore Oil 1.
20-28-2w Smith, Mississippi Valley Oil 1
5-28-1w Johnson, Comar Oil 1-W.
Lawrence, Comar Oil 4.
Bechtel, Comar Oil 7.
Townsite, Braman Oil 1.
8-28-1w Horne, Comar Oil 3.
Andrews, Wentz Oil 1.
36-28-1w School land, Dewey & Hofter 1
11-28-1e Lowery, Okla. Northern O. & G. 1
35-28-2e Coleman, Ingram & Wilson 2.
3-27-1w Moore, Arkansas Fuel Oil 1.
4-27-1w Kelly, Arkansas Fuel Oil 4.
Case, Polling & Denny 5.
5-27-1w Jameson, Blackwell O. & G. 3, 4
8-27-1w Moore, Blackwell O. & G. 2.
9-27-1w Geiger, Blackwell O. & G. 5, 6-A
Burkholder, Polling & Denny 4.
19-27-1w Gaylor, Marland Oil 1-A.
31-27-1w Cade, Marland Oil 1.
3-27-2e Balzar, Mississippi Valley Oil 2
26-27-2e Harper, Mummert et al 1.
12-26-2w North, Marland Oil 6.
21-26-1e Keathley, A. D. Morton et al 1.
32-26-2e McNeal, Ponca Lee Oil 1.
21-25-1w Coyle, Philmack Oil 1.
28-25-1w Leagrote, Barnsdall Oil 1, 2, 3.
Gardner, Gypsy Oil 2, 3, 4.
Becker, Skelly Oil et al 2, 3, 4
Siler, T. B. Slick 1.
Siler, The Texas Company 3, 4.
Mahoney, Wentz Oil 11, 12, 13, 14, 15.
29-25-1w Highley, Blackwell O. & G. 1
32-25-1w Hack, Gypsy Oil 1.
33-25-1w Smith, Gypsy Oil 1.
35-25-1w Endicott, T. B. Slick 7.
Endicott, T. B. Slick 1-E
17-25-2e Arrow, Marland Oil 10-A
18-25-2e Walkingsky, Marland Oil 1.
Shut Down
21-29-1w Pribolb, Comar Oil 2.
21-29-1w Harwell, Comar Oil 3.
5-28-1w Biddle, Comar Oil 6-W.
O-r, Comar Oil 1, 2-W.
McCullough, Comar Oil 1, 3.
8-28-1w Horne, Comar Oil 2-W.
27-28-1w Walker, Simms Pet. 1.
6-28-1e Wolfe, McComas et al 1.
4-27-1w Moore, Schoquwald et al 1.
9-27-1w Burkholder, The Texas Company 2.
16-27-1w Slocum, Anolu Oil 3.
Barr, Manahan et al 2.
12-26-2w North, Marland Oil 4.
6-26-1w Glasgow, National Union Oil 1
28-26-1w Barclay, Tom Palmer et al 1.
15-25-1w McDaniels, Tonkawa Dev. Co. 1
4-25-2e Foureyes, Marland Oil 10-A
Rigs, 6; wells drilling, 89; total, 95

PAYNE COUNTY
Rigs
2-20-2e Catts, Colorado O. & G. 1.
26-18-3e Waltman, T. C. M. Oil 2, 6.
32-18-3e Widdoes, B. G. Gloyd et al 1
31-18-4e Thomas, Magnolia Pet. 1.
Wells Drilling
4-19-1w Kinneman, Rotter-Foster 1
12-19-1w Combs, Tidal Oil 1.
2-19-3e Hall, Mid-Continent Pet. 1
5-19-5e Martin, Magnolia Pet. 1.
8-19-5e Garr, Magnolia Pet. 3.
Hughes, Magnolia Pet. 1
E. Hughes, Magnolia Pet. 1
10-19-5e Mullins, Pure Oil 2.
13-19-5e Crockett, Sinclair Oil 12
15-19-5e Moore, Twin State Oil 1.
36-19-5e Long, Josey Oil 5.
23-18-4e Tilber, Twin State Oil 1.
23-18-3e Shannon, Deep Rock O. & G. 2
26-18-3e Morehead, Deep Rock O. & G. 1
Barth, Deep Rock O. & G. 5.
Liston, Empire G. & F. 4, 5, 6.
Waltman, T. C. M. Oil 3, 5.
27-18-3e Murlin, Gypsy Oil 1.
1618-4e Colen, Deep Rock O. & G. 1.
26-18-4e Broyles, New England O. & P. L. 3.
7-18-5e Blue, Marland Oil 3.
8-18-6e Welch, Consolidated Drlg. Co. 1-A
5-17-4e Sharrum, Mulberry Oil 4.
6-17-4e Payne, Magnolia Pet. 1.
5-17-5e Swartout, Shaffer O. & R. 1
Shut Down
22-20-3e Royester, Ossenkneck 1.
21-19-1w Lewis, Ponca O. & G. 1.
1-18-5e Laughlin, Josey Oil 4.
Rigs, 5; wells drilling, 31; total, 36.

LINCOLN COUNTY
Rigs
5-16-8e Roberts, Olean Pet. 7.
23-16-8e Scott, Inter-Ocean Oil 5.
Wells Drilling
8-15-6e Selby, Prairie O. & G. 1.
35-14-6e White, Prairie O. & G. 1
34-17-2e Lukenbeal, Wentz Oil 1.
31-17-4e Scott, Roxana Pet. 1.
33-17-4e Griswald, Mid-Kansas Oil 1
20-17-5e West, Carter Oil 1.
31-17-5e Cook, Shaffer O. & R. 1.
18-16-4e Morris, Olean Pet. 1.
6-16-5e Van Camp, T. P. C. & O. Co. 1
9-16-8e Yardy, Margay Oil 4.
21-16-8e Johnson, Tidal Oil 3.
35-16-8e Harjo, Wilcox O. & G. 4.
25-15-5e Lillibridge, Wilcox O. & G. 1.
16-15-4e School land, Empire G. & F. 1.
8-15-6e Hopewell, Gypsy Oil 1.
Owens, Magnolia Pet. 2, 3, 4.
Earp, Mid-Continent Pet. 8, 9.
Varner, Phillips Pet. 1.
16-15-6e School land, Sinclair Oil 1.

7-14-4e Norton, T. B. Slick 1.
8-14-4e Gillian, Magnolia Pet. 1.
3-14-5e Belless, Magnolia Pet. 5.
10-14-5e Davenport townsite, Magnolia Pet. 1.
Chapman, Magnolia Pet. 3.
21-14-5e Love, Pure Oil 1.
22-14-5e Craig, The Texas Company 1.
27-14-5e Garrett, Sinclair O. & G. 1.
9-14-6e Teter, Mid-Continent Pet. 1.
33-13-4e Williams, Phillips Pet. 1.
16-13-5e School land, Amerada Pet. 1.
1-12-5e Thompson, Independent & McCulloch 1.
8-12-5e Richardson, Barnsdall Oil 1.
13-12-6e Strip, Mid-Continent Pet. 1.

Shut Down

19-16-8e Myers, Slick & Kawfield 2.
15-15-6e Hubbard, Johnsdahl 1.
11-14-5e Caves, Gypsy Oil 15.
Rigs, 2; wells drilling, 39; total, 41

GRANT COUNTY

Rigs

24-27-3w Birdston, Burns & Beasley 1.

Wells Drilling

6-28-3w Snyder, Otstot Dev. Co. 1.
19-28-3w Lehring, Wrightsman 1.
36-28-3w School land No. 32, Marland Oil 1.
6-27-3w Barnard, Flannigan & Dedman 1.
22-27-3w Lane, Blackwell O. & G. 2.
33-26-3w Muegee, Gypsy Oil 1.
2-25-4w Vallner, Cowden 2.

Shut Down

14-27-3w Howell, Western States 1.
23-27-3w Flood, Larutan Fuel Co. 1.
34-26-4w Royce, Brazill & Moses 1.
16-26-3w Sherrer, Flannigan & Dedman 1.
Rigs, 1; wells drilling, 11; total, 12.

NOBLE COUNTY

Rigs

1-22-2w White, K-D Oil 3.

Wells Drilling

18-24-2w Coulter, D. W. Moore et al 1.
16-24-1w School land, Mid-Continent and Marland 13.
1-24-1e 101 Ranch, George Miller 1.
9-24-1e Miller, Independent et al 1.
22-23-2w Brumfield, Mid-Continent Pet. 15.
18-22-2w Pfrimmer, Hartman & Skaer 1.
26-22-2w Schoop, Champlin Refg. 1.
13-22-2e Tillman, Skelly Oil and A. D. Krow 1.
15-21-2w Taylor, Magnolia Pet. and Bu-Vi-Bar Pet. 1.
21-21-2w Reynolds, Magnolia Pet. and Bu-Vi-Bar Pet. 1.
22-21-2w Ableidinger, Prairie O. & G. 1.

Shut Down

22-24-2w Kurby, Wilkins & Kores 1.
16-24-1w School land, Mid-Continent Pet. and Marland 12.
29-24-1w Reed, Mid-Continent Pet. 6.
1-22-2w Stephenson, K-D Oil 1.
33-22-2w Burk, Elane Oil 1.
16-21-2w Treman, Red Bank Oil 1.
7-21-1w Williams, R. L. Corley 1.
Rig, 1; wells drilling, 18; total, 19.

GARFIELD COUNTY

Rigs

24-24-3w Disney, Failing & Lawson 1.
36-23-5w Nelson, Otstot et al 1.
18-22-3w Schroeder, Roxana Pet. 10-T.
19-22-3w Kisner (W), Sinclair Oil 32, 37.
11-21-4w Fee, Beople et al 1.

Wells Drilling

1-22-4w Johnson, Prairie O. & G. 2.
22-24-6w Zalondek, Wilcox O. & G. 1.
10-24-4w Meyers, Sinclair Oil 1.
22-24-4w Brunkin, Shaffer-Gardner 1.
14-24-3w Gorsuch, Fager Oil 1.
34-24-3w Hayes, Roxana Pet. 1.
6-23-4w Chevelier, Haley, Garber & Pulse 1.
29-23-4w Bunker, Roxana Pet. 1.
31-23-4w Johnson, Bu-Vi-Bar Pet. 1.
19-23-3w Garber, Marland Oil 1.
13-22-4w School land, Mid-Continent Pet. and Marland Oil 6-A, 64.
Walker (N), Sinclair Oil 25, 36, 43, 54, 55, 60.
14-22-4w Dively, Sinclair Oil 5.
36-22-4w Austin, Sinclair Oil 6.
Ed Kisner, Sinclair Oil 8.
7-22-3w Lynds, Franchott 3.
18-22-3w Schroeder, Roxana Pet. 28, 8-H, 11-L, 9-T.
Hartley, Sinclair Oil 4, 26, 35, 39, 40, 45, 46, 51.
19-22-3w L. Crews, Sinclair Oil 16.
E. Kisner, Sinclair Oil 15.
Kisner (W), Sinclair Oil 12, 27, 31, 33, 34, 35, 36.
21-22-3w Allen, Champlin Refg. 2-A.
30-22-3w Campbell, Sinclair Oil 21.
L. Crews, Sinclair Oil 6.
Windler, Sinclair Oil 11.
31-22-3w McLean, Chas. Knox 4.
12-21-4w Smith, Tidal Oil 1.
6-21-3w Woods, Imo Oil 1.
9-21-3w Bogus, Penders Pet. 1.
22-21-3w Detwiler, Slick, Harrington et al 1.
2-20-5w Fee, Sinclair Oil 1.
9-20-4w Looman, Marland Oil 1.
12-20-4w Miller, Marland Oil 1.

Shut Down

17-23-8w Dyche, Jack Reid et al 1.
26-23-7w Cox, Katherine Oil Synd. 1.
6-23-6w Hess, Weir & Wood 1.
35-23-3w Carter, Failing & Lawson 1.
3-22-5w Swinery, Ashby & Barr 1.
1-22-4w Seaman, Hopper et al 1.
13-22-4w School land, Mid-Continent Pet. and Marland Oil 46.
Walker (N), Sinclair Oil 6, 29-W, 46.
24-22-4w Belveal, Healdton Pet. 20.
Belveal, Sinclair Oil 21, 25.
16-22-3w School land, Hopper-Chappell 1.
18-22-3w Schroeder, Roxana Pet. 13-W.
18-22-3w Hartley, Sinclair Oil 22, 37, 47, 48.
2-21-7w Montgomery, Frank Frantz 1.
31-21-5w Vandewark, E. A. Summers 1.
12-21-4w Schriver, Beople et al 1.
5-21-3w Cain, Penders Pet. 2.
11-20-8w Secor, Garfield & Buell et al 1.
7-20-6w Semrad, O. O. Owens 1.
13-20-4w Faramel, Summers et al 1.
Rigs, 6; wells drilling, 81; total, 87.

GRADY COUNTY

Rigs

31-10-8w Thompson, Hawkins & Young 1.
23-5n-8w Edmundson, Skelly Oil 5.
11-4n-8w Smith, Magnolia Pet. 2.
21-3n-5w Russell, Magnolia Pet. 1.
27-3n-5w Ervin-Polson, Carter Oil 4.
34-3n-5w Nation, Garvin Drlg. Co. 1.
Mitchell, Magnolia Pet. 3.
Martin, Todd et al 2.

Wells Drilling

21-8n-7w Webb, Watchorn O. & G. 1.
10-5n-7w Freeman, Badgett & Hughes 1.
19-5n-7w Thomas, Gant & Arrowsmith 1-A.
26-4n-8w Hadley, Nicklos O. & G. 1.
31-4n-5w Anderson, Magnolia Pet. 1.
8-3n-5w Marland-Horton, Carter Oil 2.
17-3n-5w Burkes, Marland and Joe Ray 1.
21-3n-5w Kerans, Carter Oil 1.
Carter, Kerans, Carter Oil 1.
27-3n-5w Adair, Carter Oil 1.
Polson, Carter Oil 1, 2.
White Eagle-Polson, Carter Oil 2.
Ervin Polson, Carter Oil 3.
Kilgore, Clark & Cowden 1.
Adair, Critchlow et al 2.
Cochran, Magnolia Pet. 2.
28-3n-5w Cassie Kerans, Magnolia Pet. 1.
34-3n-5w Nation, Briscoe & Hall 1, 2.
Wham, Carter Oil 2.
Nation, Carter Oil 1.
Mitchell, Magnolia Pet. 2.

Shut Down

10-9n-6w Baker, Travis et al 1.
2-8n-8w Bray, John Schwarzfischer 1.
35-5n-8w Dryden, J. B. Nichols Oil 1.
15-5n-7w Null, Badgett & Hughes 1.
5-3n-5w Dutton, Sinclair Oil 1.
Rigs, 8; wells drilling, 28; total, 36.

COMANCHE COUNTY

Rigs

24-2n-10w Cox, William Green 4.
Watson, Westheimer & Daube 2.
30-2n-9w Indian, Continental Oil 2.

Wells Drilling

2-4n-11w Haller, Garvin Drlg. Co. 2.
21-4n-10w Rowe, Mid-Kansas O. & G. 1.
34-4n-10w Gambell, John Graham 2.
10-3n-10w Jennings, Magnolia Pet. 1.
24-2n-10w Cox, William Green 3.
Allen, Shaw & Rathke 1.
19-2n-9w ———, Cherry, Couch & Hambre Oil 1.
Price, Magnolia Pet. 1.
Guthrie, Westheimer & Daube 1.
30-2n-9w Hardy, Magnolia Pet. 2.
29-1n-12w Bentley, Bentley et al 1.
30-1s-13w Cox, Mid-Kansas Oil 1.

Shut Down

30-4n-10w Hinds, Clyde Becker 1.
22-4n-10w Roll, Cochran & Abernathy 1.
35-4n-9w Warehime, Daisey Bell Oil 1.
35-4n-9w Saunders, Cook & Graham 1.
10-2n-10w Spitler, Danciger Oil 1.
20-2n-10w School, Ashcraft et al 1.
5-1n-10w Neeley, P. W. Appleby, Jr. 1.
Rigs, 3; wells drilling, 19; total, 22.

PONTOTOC AND GARVIN COUNTIES

Rigs

28-5n-5e Hatcher, Tidal Oil 1.
Becker, Humble O. & R. 1.
35-4n-6e Rayborn, Rowles et al 1.
5-3n-4e Coon, Carter Oil 1.
17-4n-6e Phillips, Bryan et al 2.

Wells Drilling

34-5n-6e Stinger, American O. & R. 1.
27-4n-1e McCurtain, Sinclair Oil 1.
25-3n-1w Paxton, Guy Fisher et al 1.
12-3n-1e Vaughn, Magnolia Pet. 1.
35-3n-2e Franklin, T. P. C. & O. Co. 1.
18-3n-4e Wren, Carter Oil 1.
14-1n-3w Newberry, S. P. Smith 7.
16-1n-3w Harris, Magnolia Pet. 12.
17-1n-3w Derdeyn, Carter Oil 8.
Derdeyn, Mid-Continent Pet. 4.
Derdeyn, The Texas Company 13.
31-1n-3w Bun, Magnolia Pet. 1.

Shut Down

25-5n-6e Patterson, Gillette & Krueger 1.
28-4n-7e Faulkner, Hughes et al 3.
28-3n-4e Lloyd, O. F. Smith 1.
29-1n-3w Derdeyn, Markham et al 1.
Rigs, 5; wells drilling, 16; total, 21.

STEPHENS AND COTTON COUNTIES

Rigs

5-1n-9w Borovenski, Red Seal Refg. Co. 1.
24-1n-9w Brown, Gypsy Oil 5.
36-1s-9w School, Walter Gant 2.
17-1s-9w Furst, Magnolia Pet. 1.
28-1s-8w Taliaferro, McAllester et al 2.
30-1s-8w Marrey, Garvin Drlg. Co. 1.

Wells Drilling

10-2n-9w Waters, Homaokla Oil 1.
25-2n-4w Gann, Gant et al 1.
31-2n-4w Jefferson, Lewis Clark Pet. and Montgomery 1.
24-1n-9w Plemmons, E. S. Carry Oil 2.
25-1n-9w Harris, Magnolia Pet. 11.
19-1n-8w Funk, C. E. Elzy 2.
30-1n-8w Hardin, Carter Oil 7.
32-1n-5w Charleston, Gates Oil 1.
Charleston, Magnolia Pet. 2.
Fink, Garvin & Urice 1-A.
24-1s-9w Johnson, Magnolia Pet. 1.
25-1s-9w D. Russell, Magnolia Pet. 8.
18-1s-8w Johnson "B", John Farrell 1.
20-1s-8w D. Bartley, Magnolia Pet. 11.
22-1s-8w Warner, Harry Hanbury 1.
27-1s-8w Schick, Walker Valley Oil 3.
28-1s-8w Taliaferro, Carter Oil 1.
Nelson, V. A. Kidney 2.
9-1s-5w Morris, Carter Oil 1.
12-1s-5w Doak, M. L. Amster 1.
26-1s-5w Skelly, Skelly Oil 28.
34-1s-5w Ziegler, Magnolia Pet. 18.
3-2s-5w Harris, Magnolia Pet. 2, 3.
8-2s-4w Cobb, Magnolia Pet. 9.
12-4s-10w Cooper, W. B. Lindsey 1.

Shut Down

36-2n-9w School, Malernee 1.
14-2n-5w Truitt, Rogers et al 2.
22-2n-4w Morris, F. Phillips & Barnsdall 1.
23-1n-9w Brown, Steve Linson 4.
19-1n-8w Funk, Ill.-Okla. Oil 1.
21-1s-10w Johns, McBee & Heacock 1.
20-1s-8w Brittian, Malernee & Dunlap 2.
Brittian, Safety First Oil 8.
28-1s-8w Voss, Guy Brown & McAlister 4.
2-1s-4w Godwin, McBride et al 1.
2-2s-8w Gilworth, Pace et al 1-A.
Rigs, 6; wells drilling, 37; total, 43.

JEFFERSON COUNTY

Rigs

14-7s-6w Smith, J. R. McCoy et al 1.

Wells Drilling

5-4s-6w Hunton, Homaokla Oil 1.
27-6s-5w Cline, Humble O. & R. 1
33-6s-5w Seay, A. C. Brown 7.
Seay, Gypsy Oil 8, 30, 31.
34-6s-5w Seay, Ziegler et al 1.
26-7s-6w Spain, Gypsy Oil 1.
1-7s-4w Cassidy, New England O. & P. L. 1.

Shut Down

23-7s-7w Hayes, L. C. Hivick et al 1.
5-7s-5w Seay, Woodruff Bros. 1.
25-7s-4w Black, Penders Pet. 1.
Rig, 1; wells drilling, 12; total, 13.

CARTER COUNTY

Rigs

32-1s-3w Morrison, Magnolia Pet. 1.
33-1s-3w Bumpass, Humble O. & R. 3.
34-1s-3w Newstadt, Magnolia Pet. 1.
Snyder, Westheimer 3.
3-2s-3w Pruitt, Wirt Franklin & Prairie 10.
23-2s-3w Lohman, Magnolia Pet. 11.
J. Lohman, Magnolia Pet. 12.
8-2s-2w Pierce, Skelly Oil 3.
15-2s-2w E. Cox, Magnolia Pet. 3.
2-5s-2w Bradford, Twin State Oil 1.

Wells Drilling

18-1s-2w Hardin, Magnolia Pet. 2.
19-1s-3w Jordan, Humble O. & G. 5.
31-1s-3w Moore, Magnolia Pet. 1.
33-1s-3w Bumpass, Magnolia Pet. 3, 5, 6.
Bumpass, Cameron Refg. et al 1.
Lusk, Humble O. & R. 5, 6.
Bumpass, Humble O. & R. 1, 2.
34-1s-3w Hernstadt, Gilmer Oil 1.
McClish, Gypsy Oil 2, 3.
Fish, Magnolia Pet. 4.
Newstadt, Magnolia Pet. 3.
Ricketts, Magnolia Pet. 1.
Snyder, Magnolia Pet. 3.
Parnell, Simpson & Fell 3.
Snyder, Westheimer 2.
2-2s-3w Calvery, Schermerhorn 1.
5-2s-3w Lillie, Gypsy Oil 3.
Richards, Humble O. & R. 1.
Reynolds, Humble O. & R. 1.
Adams, Magnolia Pet. 1.
Reynolds, Mid-Continent Pet. 1.
Smith, Wirt Franklin 1.
Pruitt, Wirt Franklin & Prairie 4, 7, 8, 9.
Smith, Skelly Oil 1, 2.
12-2s-3w Kennedy, Pure Oil 2.
22-2s-3w Morris, Magnolia Pet. 1.
Carpenter, C. R. Smith 1.
23-2s-3w E. Lohman, Magnolia Pet. 10, 12.
J. Lohman, Magnolia Pet. 10, 11.
M. Williams, Magnolia Pet. 1.
McClain, Magnolia Pet. 1.
Smith-Davis, C. R. Smith 1-A.
32-2s-3w Johnson, Sturm Drlg. Co. 1.
6-2s-2w Higgins, Coline Oil 6.
7-2s-2w Pierce, Coline Oil 9.
Watkins, Iowa Oil 3.
8-2s-2w Pierce, Carter Oil 2.
Pierce, Skelly Oil 1, 2.
15-2s-2w Pierce, Magnolia Pet. 1.
16-2s-2w Higgins, Roxana Pet. 1-B.
Cox, Magnolia Pet. 1.
Wilson, Magnolia Pet. 2.
17-2s-2w Riley, Humble O. & R. 1.
Moore, Skelly Oil 1.
21-2s-2w Wilson, Magnolia Pet. 3.
25-2s-2w McCoy, Hivick et al 1.
31-2s-2w Bennett, Hilltop Oil 14.
35-5s-1w Joy, Humble O. & R. 1.
20-5s-1e Baptiste, Amerada Pet. 25, 26.
Criner, Amerada Pet. 9.
24-5s-1e Jelliff, Schermerhorn et al 1.

Shut Down

19-1s-2w Morris, McGee 1.
22-2s-3w Calvery, Wirt Franklin 1.
7-2s-2w Watkins, Iowa Oil 1.
8-2s-2w Pierce, Skelly Oil 4.
20-5s-1e Baptiste, Amerada Pet. 27.
Rigs, 10; wells drilling, 70; total, 80.

MISCELLANEOUS COUNTIES

Rigs

Harper County—
30-29-22w ———, D. T. Water 1.
Woodward County—
4-23-17w Nordyke, Diamond Drlg. Co. 1
Logan County—
11-18-3w Matthews, Santrock Drlg. Co. 1
Kingfisher County—
20-15- 8w Otis, Hoffman et al 1.
25-15- 5w Davidson, Reiter-Foster Oil 1
Oklahoma County—
7-14- 3w ———, J. V. Bailey 1.
17-14- 2w Lynn, Von Stein & Hagerling 1.
13-13- 1w Martin, E. A. Hawley & Rosser 1
McIntosh County—
18-11-14e Stidham, Tiger Mtn. Oil 3.
Pottawatomie County—
11-7n-4e Hathcock, Magnolia Pet. 1.
Beckham County—
22-9n-23w Hawkins, Magnolia Pet. 1.
Caddo County—
2-5n- 9w Marchand, Gorton Trust Co. 2.
12-5n- 9w Rigney, Flora-Okla. Oil 1.
Tillman County—
8-4s-18w ———, S. C. Canary & Barnsdall Oil 1.
Marshall County—
24-5s- 5e Arbuckle, United Eight Oil 3.

Wells Drilling and Shut Down
(Shut down wells indicated by*)

Harper County—
14-25-22w Cooper, Hoffer Oil 1.
Ellis County—
32-24-24w Meehan, Utility O. & G. 1*.
Major County—
36-22-14w Cheyenne Basin, The Texas Company 1*.
36-21-11w Gray, Frantz & Slick 1.
Woodward County—
25-21-21w Elmore, Sharon Oil 1.
34-20-20w ———, Small & Kennessey 1.
Kingfisher County—
16-19- 5w Kelly, Max Kelly et al 1.
12-18- 5w Robins, Marland Oil 1.
6-16- 7w Canfield, Pet. Eng. Core Drill 1.
27-16- 6w Stutsoon, McKenna & Crawford 1.
17-15- 6w Creaves, Chi Oil & Nichols 1*.
Dewey County—
7-18-15w Chronister, Meyers 1*.
9-18-15w Perfect, Huckelby-McCoy 1*.
Logan County—
30-19- 4w McCullough, Roxana Pet. 1.
32-18- 4w ———, Bryan & Emery 1*.
32-19- 2w Rogers, Carter Oil 1.
28-18- 4w Moore, Franklin Oil Assn. 1*.
33-18- 3w Quier, Haley & Pioneer Pet. 1*.
5-17- 1w Baker, Zingerle & Bailey 1.
28-17- 1e Berry, T. B. Slick 1.
28-16- 1w Lair, Blackford O. & G. 1*.
24-15- 3w Amsey, W. R. Ramsey 1.
Blaine County—
21-15-10w Eklemier, Okoma Oil 1*.
Canadian County—
9-14- 6w Platt, A. D. Spears et al 1*.
34-13- 9w Dawson, Thos. Revelle 1.
2-13- 8w Setter, Carroll & Zweicher 1*.
29-13- 5w Pazourek, T. B. Slick & Ben Franks 1.
29-11- 7w Sanders, O. D. Jones 1*.
Oklahoma County—
15-14- 2w Myer, Red Seal Refg. 1.
9-14- 1w Miller, Maxine Pet. 1.
10-12- 3w Edwards, Cromwell O. & G. 1.
Cimarron County—
27-5n-5e State land, Ramsey Brothers 1.
2-2n- 9e Smaltz, Fenton, Brookins & Flowers 1.
Texas County—
32-5n-12e Hovey, Valerius & Prairie 1*.
21-4n-14e Hovey, Wilcox O. & G. 1.
18-3n-12e Zea, Valerius O. & G. 1.
28-3n-13e Zea, Wilcox O. & G. 1.
9-3n-15e Hurliman, Reiter-Foster Oil 1.
10-2n-11e Kugle, Reiter-Foster Oil 1.
23-2n-18e Graves, Connelly, Trammel & Danner 1*.
4-1n-12e Ellison No. 2, Haley, Garber & Pulse 1.
5-1n-13e Tansey, Connelly, Trammel & Danner 1*.
Mayes County—
20-20-20e Longcrier, M. C. Fore & F. R. Shepard 1.
8-20-19e Drew, J. L. Dixon 1.
McIntosh County—
35-12-15e Wolf, Gilcrease Oil 1.
12-12-16e Love, J. A. Sheppard et al 3.
Sequoyah County—
32-11-25e Miller, Sequoyah Oil 1.
1a-11-26e Hicks, Citizens Gas Co. 1*.
Pittsburg County—
26-9n-16e Jennings, Western National Gas Co. 1.
32-9n-16e Smith, J. L. Pattison 1.
8-2n-16e Wilkins, Baker & Hailey 1*.
Haskell County—
16-9n-18e Sanders, Marion Oil 1*.
Latimer County—
7-5n-18e Hunt, P. & F. Pet. 1.
Pottawatomie County—
26-11- 4e Kline, Sikes, Kilgore & Shaffer 1.
12-10- 3e Ives, Sikes, Kilgore & Shaffer 1.
25-10- 4e Madgett, McCulloch Oil 1.
28-10- 4e Toney, Central Natl. Oil 1*.
16-10- 5e School land, Clark Edwards et al 1*.
16-9n- 5e School land, Gypsy Oil 1.
3-8n- 4e Kenyon, Tidal-Osage Oil 1.
15-7n- 4e Standridge, Derby Oil 1.
19-7n- 4e Talley, Pierce Oil 1.
20-7n- 5e Fyke, Magnolia Pet. 1.
10-6n- 2e McGahey, Davis Detrick et al 1.
20-6n- 4e Hibbard, Croxton Wrightsman et al 1*.
Beckham County—
21-9n-23w Roberts, W. D. Shedden 1*.
25-8n-22w McGee, W. R. Duke 1*.
Van Vector, Kadane et al 1.
Kiowa County—
5-6n-18w Bonham, A. C. Varner 1.
6-2s-16w ———, Landfair 1*.
Caddo County—
22-6n-10w Jacobs, English Drlg. Co. 1.
31-6n- 9w Starkweather, English Drlg. 1.
29-5n-12w Galbreath, W. J. Hartley 1.
23-5n-11w ———, Abernathy et al 1*.
5-5n- 9w Stevens, Magnolia Pet. 2.
10-5n- 9w Fee Kane, Magnolia Pet. 6.
11-5n- 9w Lacky, Briscoe & Hall 1*.
Lacky, Lone Star Gas 5.
12-5n- 9w Wagoner, Gorton Trust Co. 8.
Tillman County—
13-1s-18w Snelling, Oasis Oil 1*.
1-3s-15w Riverbed, Tipton et al 1.
Murray County—
4-2s-5e Olson, Humble O. & R. 1.
Johnson County—
26-4s-5e Chastain, Deese et al 1.
Atoka County—
17-4s-11e Dabney, Hanson et al 1*.
Marshall County—
17-5s-5e Sacra, Kennedy Drlg. Co. 1*.
Love County—
10-6s-2e Laten, R. M. Boring et al 1*.
2-6s-1e Anderson, Humble O. & R. 1.
7-6s-2e Brown, Magnolia Pet. 1.
25-6s-2e Dillard, Schermerhorn 2.
28-6s-2e Fee, Westheimer 1.
Rigs, 15; wells drilling, 90; total, 105.

KANSAS FIELDS

Summary of Wells Completed

County—	Comp.	Prod.	Dry	Gas
Anderson	30	1,205	8	2
Butler	21	1,270	10	..
Chautauqua & Elk	8	*20	5	1
Cowley	9	135	5	..
Greenwood	66	5,330	19	1
Lyon	18	575	9	..
Montgomery	14	108	3	3
Miscellaneous	56	2,414	23	2
Total, August	222	11,057	77	9
Total, July	303	18,892	109	10
Difference	81	7,835	32	1

Summary of Rigs and Wells Drilling

County—	Rigs	Drlg.	Total
Butler	8	39	47
Chautauqua & Elk	2	20	22
Chase	1	7	8
Cowley	11	31	42
Greenwood	28	76	104
Kingman	0	12	12
Lyon	7	9	16
Marion	2	6	8
Montgomery	0	12	12
Rice	3	10	13
Sumner	5	21	26
Miscellaneous	9	35	104
Total, August	76	338	414
Total, July	91	347	438
Difference	15	9	24

ANDERSON COUNTY

3-22-19 Frazier, John Vanhorn 14 15
21-22-19 Wright, Shebank et al 1 ..... dry
33-22-19 Boon, Arkansas Fuel Oil 2 50
Boon, Arkansas Fuel Oil 3 ..... gas
13-21-20 Ewing, Peerless Oil Co. 25 50
Ewing, Peerless Oil Co. 6 75
7-21-21 Diedel, Fleming & Bedford 8 ..... dry
33-20-21 Diedel, Fleming & Bedford 13 80
28-20-21 McCrabb, Monitor O. & G. 4 35
McCrabb, Monitor O. & G. 5 40
33-20-21 Cleveland, H. R. McGill et al 10 90
29-20-21 McCrabb, Monitor O. & G. 6 30
McCrabb, Monitor O. & G. 7 35
McCrabb, Monitor O. & G. 8 30
28-20-21 McCrabb, Monitor O. & G. 11 30
McCrabb, Monitor O. & G. 10 30
McCrabb, Monitor O. & G. 9 20
7-21-21 Diedel, Fleming & Bedford 9 ..... dry
18-21-20 Babb, Peerless Oil 4 10
15-21-20 Ewing "B," Peerless Oil 7 50
7-22-19 Frazier, John Vanhorn 15 10
28-22-19 Albright, W. S. Fees 17 20
3-22-19 Frazier, John Vanhorn 16 ..... gas
18-21-21 Crazoier, Peerless Oil of Kansas 9 30
Mulkey, Brady & Morrison 9 45
13-21-20 Ewing "B," Peerless Oil of Kansas 8 65
33-20-21 Kretchmer, Kewanee O. & G. 14 125
13-21-20 Ewing "B," Peerless Oil of Kansas 10 80

18-21-2e Mulkey, Brady & Morrison 21 ... 5e
19-21-2e Ewing "B," Peerless Oil of Kansas 9 ... 8e

Wells completed ... 30
Production ... 1205
Dry ... 3
Gas ... 2
Gas production ... 2,000,000

BUTLER COUNTY

34-25-5e Geddis, Connell et al 1 ... dry
25-27-4e Skaer, Magnolia Pet. 5 ... dhy
26-27-4e Safford, Safford et al 8 ... 100
21-27-5e Brower, Holl et al 1... dry
12-27-7e Seward, White Eagle et al 1... 200
22-27-7e Barnhill, Sinclair Oil 5 ... 40
29-28-4e Kirkpatrick, Empire G. & F. 12 100
3-28-8e Gilson, Shawver & Sutter 1 ... dry
27-27-6e Sterns, Derby Oil et al 1 ... 140
23-27-7e Harris, Mid Kansas Oil 2 ... 200
3-28-6e Gilson, Markham et al 1 ... dry
30-28-6e Pettit, Magnolia Pet. 2 ... 20
35-27-4e Skaer, Empire G. & F. 16 ... 130
17-28-6e Pettet, Phillips Pet. 1 ... 10
35-26-5e Bisagno, Sitran Bros. 7 ... dry
27-26-7e Young, Empire G. & F. 5 ... 80
34-27-6e Schriver, Magnolia Pet. 1 ... dry
3-28-6e Kramer, Allison & Fitzwilliams 3 ... 250
18-28-6e Cotton, Magnolia Pet. 1 ... dry
26-28-6e Pettet, Magnolia Pet. 3 ... dry
23-27-7e Farner, Prairie O. & G. 1 ... dry

Wells completed ... 21
Production ... 1270
Dry ... 10

CHAUTAUQUA AND ELK COUNTIES

33-32-11 Burch, Skow Bros. 1 ... dry
17-29-10 Taylor, Ark. Fuel Oil 2 ... dry
18-29-10 Payne, Ohio Fuel Oil 1 ... gas
27-31-10 Murphy, Theta Oil 1... dry
26-34-11e Thornhill, Prairie O. & G. 9 dry
28-33-11 O'Neil Ranch, Rigdon & Bruen 142 ... 10
O'Neil Ranch, Rigdon & Bruen 141 ... 10
5-33-9e Gass, Harpst & Craver 1 ... dry

Wells completed ... 8
Production ... 20
Dry ... 5
Gas ... 1
Gas production ... 1,125,000

COWLEY COUNTY

19-32-5eCavit, Duffield et al 1 ... dry
Barlow, J. A. Hull 4 ... 75
28-33-3e Caldwell, W. Phillips & Marland 12 ... 25
15-34-4e Pollock, Bunnell et al 1 ... dry
14-30-6e Hulmes, Grey, Howey et al 1. dry
13-32-4e Lierman, Marland Oil 2 ... 10
31-30-6e Robbins, Lewis Oil 3 ... 25
29-31-5e Withliffe, Roth, Farout et al 1 dry
7-31-6e Eastman, Foster & Deal 1... dry

Wells completed ... 9
Production ... 135
Dry ... 5

GREENWOOD COUNTY

11-22-10 Green, Phillips Pet. 1 ... 250
20-22-10 Browning, Sinclair Oil 43 ... 150
9-22-11 Minot, Orlando Pet. et al 1... dry
14-22-11 Duby, Empire G. & F. 6... 75
4-22-12 Fankhouser, Empire G. & F. 5 300
9-22-12 Holderman, Simmons et al 1... 75
25-23-8e Scott "B," Manhattan Oil 2... 10
1-23-9e Shambaugh, White Eagle 1... 10
11-22-9e Green, McGinnis et al 4... 250
25-23-9e Marshall, Rhodes & Abels 1... dry
26-23-11 Ellis, Mid-Mont. Pet. 1... dry
27-23-13 Schindler, Mission Oil 8... 150
28-23-13 Dehlinger "A," Mid-Cont. Pet. 6 ... 45
19-24-10 Nixon, Sullivan et al 1... dry
19-24-11 Freeman, Manhattan & Phillips 3 ... 300
Lindamood, Manhattan Oil et al 2 ... dry
20-24-11 Wiggins "B," McGinnis et al 6 200
Wiggins "B," McGinnis et al 7 250
30-25-9e Huffman, Mid-Kansas Oil 8... 75
7-26-10 Edwards, Swift et al 1... 50
1-22-10 Fuller, Syndicate Oil 4... 100
8-22-10 Pixlee, Theta Oil 13 ... 50
30-22-10 Nichols, Tidal Oil 4 ... 15
24-23-8e Scott "C," Manhattan Oil 3... 20
25-23-8e Scott "H," Manhattan Oil 3... dry
1-23-9e Shambaugh, White Eagle 1... 10
10-23-9e Green, Manhattan Oil 25 ... dry
8-23-11 Oliver, Pure Oil 5 ... 50
29-23-11 Wilson, Sharpless et al 1... dry
4-23-13 Inthrum, Haverhill Pet. 11 ... 30
25-24-10 Nixon, Phillips Pet. 1... 260
19-24-11 Lindamood, Manhattan Oil et al 3 ... 400
Lindamood, White Eagle, Ritchey & Moore 6 ... dry
20-24-11 Wiggins "A," McGinnis et al 6 200
33-27-9e Beaumont, Roth & Farout 1... dry
6-22-10 Atyeo, Empire G. & F. 9 ... dry
20-22-10 Browning, Sinclair Oil 45 ... 150
11-22-11 Kipfer, Empire G. & F. 14 ... 100
13-22-11 Davis, White Drlg. Co. 1 ... dry
14-22-11 Fromme, Empire G. & F. 11 ... 150
18-22-11 Clopton, Mid-Cont. Pet. 11 ... 15
4-22-12 Fankhouser, Empire G. & F. 6 200
Fankhouser, Fisher, Lauck et al 5 ... 10
Fankhouser "B," Simmons et al 2 ... 125
9-22-12 Swanson, Simmons et al 5 ... 200
15-23-9e Teter, Skelly Oil 7 ... 250
Teter, Skelly Oil 4 ... 200
23-23-9e Teter, Emerald Oil 1 ... dry
29-23-10 Thrall, Empire G. & F. 3... 25
8-23-11 Oliver, Texas & Simmons 3 ... 40
9-23-11 Tiffany, Simmons et al 5... 45
17-23-11 McGilvrey, Darby et al 2 ... 200
9-23-13 Inthrum, Haverhill Pet. 12 ... 30
19-24-11 Freeman, Manhattan & Phillips Pet. 2 ... dry
20-24-11 Wiggins "B," McGinnis et al 9 200
27-26-9e Hodgen, Hiatt, Durham et al 1 dry
11-22-10 Green, Phillips Pet. 2 ... 160
11-22-11 Hind, Empire G. & F. 9 ... 80
29-22-11 Ingram, O'Neil et al 1 ... dry
33-22-11 Westcott, York State Oil 10.. 15
26-23-11 Ellis, Simmons & Amerada Pet. 3 ... 50
25-24-10 Nixon, Davis, O'Flaharty et al 1 ... dry
6-24-12 Shook, Syndicate Oil 2 ... dry
24-24-12 Warford, Troxell et al 1 ... dry
20-25-9e Ladd (Acct. 7), Mid-Kansas Oil 1 ... 25
7-27-8e Roley, Empire G. & F. 2... gas

Wells completed ... 66
Production ... 5536
Dry ... 18
Gas ... 1
Gas production ... 125,000

LYON COUNTY

13-17-12 Burnap, Jones, Wilhite et al 1 dry
25-19-12 Cook, Bucher et al 1 ... dry
30-21-10 Jones, Theta Oil 2 ... 175
Jones, Theta Oil 3 ... 20
Atyeo, Transcontinental Oil 9 ... 75
2-21-12 Brewer, Ballard, Burnes et al1 dry
29-21-12 Tile, Swartz et al 1 ... dry
30-21-12 Hurd, Landon & Phillips 1... dry
35-19-11 Jones, Wilson et al 1 ... dry
31-21-10 Atyeo "A," Transcontinental Oil 6 ... 75
33-17-11 Carr, Wilcox G. & G. 1... dry
X-19-13 Jacob, Double A Oil 1 ... dry
24-21-10 Barfinger, Pryor & Lockhart Dev. 1 ... 150
31-21-10 Atyeo "A," Transcontinental Oil 5 ... 70
Atyeo "A," Transcontinental Oil 7 ... dry
Atyeo "B," Transcontinental Oil 1 ... 40
Atyeo, Sheedy et al 11 ... 10
Atyeo, Sheedy et al 12 ... 10

Wells completed ... 18
Production ... 575
Dry ... 9

MONTGOMERY COUNTY

34-31-15 Clayton, Geo. C. Henceroth et al 3 ... dry
17-34-14 Neiswanger, Western O. & G. 4 ... 15
7-34-14 Kincaid, Bronson Oil 10 ... 3
17-34-14 Neiswanger, Western O. & G. 3 gas
31-31-17 Blaes, McLorinan Oil 12 ... 15
8-34-17 Huffman, Graham, Weigle & Stephens 1 ... 10
Carl, Van Vleck & Graham 8 ... 20
7-34-17 Ramsey, H. H. Whompler 5 ... 5
8-34-17 Curry, H. C. Weible et al 3... dry
17-34-17 Neiswanger, Western Oil 5 ... 25
31-31-17 Blaes, McLorman Oil 13 ... 15
35-31-16 Berand, Tri States Pet. 11 ... gas
36-31-16 Berand, Tri States Pet. 12... gas
14-32-15 Bullock, Hatfield et al 1 ... dry

Wells completed ... 14
Production ... 108
Dry ... 3
Gas ... 3
Gas production ... 680,000

MISCELLANEOUS COUNTIES

Allen County—
16-26-21 Gay, Harrison Engr. & Const. Co. 16 ... 4
20-25-21 Harris, W. F. Kiser et al 1... dry
16-26-20 Hobbs, A. A. Ackerman 18 ... 10
29-25-21 Harris, W. F. Kiser et al 1 ... dry
Barber County—
14-30-12w Kumburg, R. D. Rood et al 1 dry
Bourbon County—
24-24-21- Bryan, E. M. Mitchell et al 1 dry
34-25-21 Bowlus, Garland Oil 15 ... dry
24-24-21 Busby, J. L. Smith et al 3... 5
Bryan, E. M. Mitchell 2 ... dry
Bryan, E. M. Marshall et al 2 dry
24-25-21 James, F. Pavelicek 11 ... 5
Neosho County—
15-28-18 Ball, Moore & Helmick 2 ... 20
30-28-20 Roseberry, Peru Kans. O. & G. 1 ... gas
4-28-19 Burroughs, H. H. McCall 8... 50
30-27-19 Bruner, J. S. Winkler 8 ... 10
Bruner, J. S. Winkler 9 ... 3
25-27-17 Chapple, John Schill 13... dry
15-28-18 Bell, Moore & Helmick 3... dry
25-27-17 Chapple, John Scholl 13 ... 5
4-28-19 Burroughs, H. H. McCall 8 40
32-28-20 McRuch, Peru Kans. O. & G. 1 1
31-28-20 Ruch, Peerless O. & G. 1 ... gas
4-28-19 Johnson, H. H. McCall 3... 40
Labette County—
34-32-17 Rogers, Ward, Parry et al 2.. 40
10-32-17 McKnight, Geo. W. Moore 6 .. 15
Franklin County—
17-18-21 Needham, G. H. Wentz 9 ... 2
29-16-21 Gingrich, W. C. Hayhurst 12... 15
Gingrich, W. C. Hayhurst 13... 10
17-18-21 Needham, L. H. Wentz 11.... 6
21-18-21 Landis, L. H. Wentz 1... dry
17-18-21 Needham, L. H. Wentz 12... 2
Miami County—
1-18-21 Haney, E. C. Fahrmein et al 7 dry
36-17-21 McKoon, J. F. McIntire 32... 10
11-17-24 Wilson, J. Weisser et al 2... 15
36-17-21 McIntire, J. F. McIntire 34.. 10
3-17-24 Robinson, Endicott & Canerline ... dry
12-17-24 Barricklow, Weisser & Stark 8 15
12-18-21 Burns, L. D. White et al 1... dry
36-17-21 McKoon, J. H. McIntosh 32... 10
Woodson County—
30-23-14 Collins, Little Seven Oil 1 ... 75
22-26-14 Robinson, Briniger et al 1 ... 25
23-26-14 Lauber, McCollough et al 1... 10
Duncan, Peerless O. & R. 1... 40
Lauber, Peerless O. & R. 6... 300
27-24-14 Weide, Fields, Cross et al 1... dry
Coffey County—
2-20-15 Milner, Terrian, Balliere et al 1 ... dry
25-20-13 Stuart, Connell et al 1 ... dry
14-21-15 O'Mears, Ritchey & Moore 1... dry
Harvey County—
4-23-2e Brandiweide, Watchorn O. & G. 2 ... dry
Marion County—
12-20-4e Bixler, Hay & Wells 1... dry
33-20-5e Wiley, Stewart, Geer et al 1.. dry
Reno County—
5-25-4w Williams, Travis et al 1 ... dry
Rice County—
2-21-6w Walstein, Youker et al 2... 1600
Russell County—
17-12-15w Oswald-Valerius, Valerius O. & G. 19 ... 20
Sumner County—
24-33-2e Holt, Phillips Pet. 3 ... dry
Wallace County—
12-13-39w Wukfuler, J. Allen Harvey 1 dry

Wells completed ... 56
Production ... 2414
Dry ... 22
Gas ... 2
Gas production ... 110,000

BUTLER COUNTY
Rigs

33-26-3e Mulch, Neely O. & G. 1.
11-26-4e Dempsey, Van Welch et al 1.
20-26-6e McClure, Washabaugh, Foraker et al 1.
25-27-4e Starkey, Empire G. & F. 12.
17-27-6e Oldbury, Hoyt et al 1.
29-27-6e Henry, Richmond Drlg. Co. 1.
14-27-7e Harris, Sinclair Oil et al 1.
23-27-7e Harris, Mid-Kansas Oil 3.

Wells Drilling

13-25-4e Childers, Ingold et al 1.
23-26-3e Brown, Gypsy Oil 1.
24-26-4e Richards, Dickerson et al 1.
Harmon, Ramsey et al 1.
17-26-5e Koogler, Empire G. & F. 72
24-26-5e Holland, Lassen et al 1.
20-26-7e Owen, Golden et al 1.
16-26-8e Dickinson, Tidal & Gt. Southern 35
35-27-4e Starkey, Empire G. & F. 11
16-27-6e Blankinship, Phillips Pet. 2
Reynolds, Phillips Pet. 2.
17-27-6e Rose, Richmond Drlg. Co. 1.
20-27-6e Clark, Hoyt et al 6.
7-27-7e Lile, The Texas Co. 1.
12-27-7e Worrell, Empire G. & F. 1, 2.
Seward, White Eagle et al 2, 3.
13-27-7e Seward, Phillips Pet. 1.
Phillips-Seward, Phillips Pet. 1, 2
22-27-7e Harris, Mid-Kansas Oil 3.
25-27-7e La Port, Sheldon, Connell et al 1
28-27-7e Iobe, Manhattan Oil 6.
14-28-3e Shoewalter, Irwin et al 1.
3-28-6e Blakeman, Johnson et al 2, 7.
Blakeman, Mid-Kansas Oil 1.
17-28-6e Pettet, Phillips Pet. 2.
20-28-6e Pettet, Magnolia Pet. 4.
30-28-7e Jones, Herron et al 1.
7-29-4e Holcomb, Producers Pet. 1.
19-29-4e Owens, Hartman & Skaer 1.
21-29-4e Holcomb, E. Wilcox et al 1
28-29-6e Steinhoff, Gled Oil 2.
28-29-8e Bull, Roth & Co. 1.

Shut Down

26-26-5e Sluss "A," Liberty O. & G. 1.
18-26-6e Jones, Manhattan Oil et al 1.
12-29-6e Keneyon, Tobin et al 1.
Rigs, 8; wells drilling, 39; total, 47.

CHAUTAUQUA AND ELK COUNTIES
Rigs

20-31-11 La Ville, Gillespie 1.
5-32-9e Cain, Prairie O. & G. 1.

Wells Drilling

35-34-9e Bybee, Prairie O. & G. 1
7-32-11 Chaffin, Prairie O. & G. 1.
7-32-11 Chaffin, Mitchell, Frazier et al 1
13-29-8e Hanna, Roth & Co. 10.
4-29-9e Britton, McCollough & Tolbot 1
34-29-9e Denton, Denton Bros. 15.
23-29-10 Criger, Watchorn O. & G. 1.
26-29-10 Gibbon, Hedger et al 1.
13-31-10 Webb, Pure Oil 10.
14-31-10 Chaffin, Pure Oil 11.
Webb, Union Gas Corp. 14, 15.
27-31-10 Marshall, Theta Oil 1.
34-31-10 Walker, Landon et al 1.
5-31-11 Nelson, Miller et al 1.
30-31-11 Bruban, Denman Bros. et al 1.

Shut Down

11-32-10 Jeanerette, Griffith, Strueb Oil 1.
31-32-10 McNown, Foster, Harsp & Craven 1
30-30-10 Nicholson, Landon et al 1.
3-31-8e Denton, Minnehoma Oil 1.
Rigs, 2; wells drilling, 20; total, 22.

CHASE COUNTY
Rigs

36-22-9e Shambaugh, Mid-Kansas Oil 4.

Wells Drilling

25-18-6e Lipps, Preston & Pasewalk 1.
19-18-7e Lipps, Empire G. & F. 4.
5-18-9e White, Watchorn O. & G. 1.
1-21-9e Richards, Manhattan Oil & Phillips 1.
13-21-9e Owens, Sheedy et al 1.
36-22-9e Shambaugh, Barnsdall Oil 2.

Shut Down

36-22-9e Leedy, Smith, Polhamus et al 1.
Rigs, 1; wells drilling, 7; total, 8.

COWLEY COUNTY
Rigs

28-30-3e Sloan, Roxana et al 1.
28-31-4e Lewis, Trees Oil 4.
17-31-6e Harris, Tidal Oil 1.
15-32-4e Swenson, Independent Oil Co. et al 1.
Graham, Marland Oil 3.
22-32-4e Dibbins, T. B. Slick et al 1.
24-32-4e Lewis, J. A. Hull 4.
7-32-5e Craddie, Ark. Fuel Oil Co. 5.
19-33-3e Holman, Brady Bros. et al 1.
20-34-3e Surtz, Wilt & Shawver 1.
31 34-3e Mullett, Marland Oil 1.

Wells Drilling

11-30-4e Weidner, Shawver & Sutter 2.
16-30-4e Newton, Shawver & Sutter 2.
19-31-3e Shaffer, Benedum & Trees 8.
35-31-3e Wilson, Ark. Fuel Oil 1.
21-31-4e Goodrich, Twin State Oil 1.
20-31-5e Sinclair, Roth & Faurot 1.
31-31-6e Drurey, Patton et al 2.
19-32-3e Waite, Carter Oil 10.
20-32-3e Carson, T. B. Slick 1, 2.
12-32-4e Brant, Ark. Fuel Oil 1.
13-32-4e Bishop, Gypsy Oil 1.
Rockwell, Marland Oil 5.
15-32-4e School land, J. A. Hull 2, 3.
Wallace, J. A. Hull 1, 2.
Graham, Marland Oil 1.
School land, Marland Oil 1.
Wallace, Tidal Oil & Skelly Oil 1
Robieson, Trees et al 1.
24-32-4e Kukuk, J. A. Hull 16.
9-33-3e Swope, T. B. Slick 1.
7-33-7e Riding, Brown Bros. 1.
18-33-7e Smith, Doyle Eller Co. 2.
17-34-3e Baird, Shawver et al 1

Shut Down

7-30-6e White, Branson et al 1.
4-31-5e Elliott, Boxer et al 1.
16-31-7e Clover, Cosden et al 1.
30-32-5e Carlisle, Lewis Oil 2.
24-34-6e Day, S. H. E. Co. 2.
Rigs, 11; wells drilling, 31; total, 42.

GREENWOOD COUNTY

2-22-10 Bradfield, Syndicate Oil 5.
6-22-10 Atyeo, Empire G. & F. 12.
20-22-10 Browning, Sinclair Oil 41.
11-22-11 Kipfer, Empire G. & F. 15.
14-22-11 Fromme, Empire G. & F. 12.
15-22-11 Bartlett, Empire G. & F. 7.
4-22-12 Fankhouser, Empire G. & F. 8.
Fankhouser "B," Simmons et al 4
Fankhouser, The Texas Co. 3.
9-22-13 Todd, Enterprise Dev. Co. 1.
28-22-13 Barnard, Callahan, Ainsworth et al 1.
29-22-13 Luther, Simmons & Rhodes 1.
32-23-10 Thrall, Manhattan et al 58.
16-23-11 Fogle, The Texas Co. 2.
17-23-11 McGilvrey, Darby et al 4.
McGilroy, The Texas Co. 1.
28-23-13 Dehlinger "A," Mid-Cont. Pet. 8, 9.
23-24-9e Moore "B," Mission Oil 1.
25-24-10 Nixon, Phillips Pet. 2, 4.
26-24-10 Mock, McGinnis et al 1.
20-24-11 Wiggins "E," McGinnis et al 2
31-24-11 Rockhill, Theta Oil 1.
20-25-9e Hoffman, Mid-Kansas Oil 9
17-26-10 Brookover, Connell et al 1.
17-27-9e O'Brine, Mountain Oil Corp. 1
7-28-11 Schultz, McCollough et al 1.

Wells Drilling

7-24-11 Gaffney, Prairie O. & G. 1.
2-22-10 Sheppard, Manhattan Oil et al 1.
6-22-10 Jones, Empire G. & F. 3.
8-22-10 Pixlee, Mid-Kansas Oil 5.
12-22-10 De Malorie, Davis, Hazlett et al 21, 22.
18-22-10 Browning, Rhodes et al 6.
19-22-10 Browning, Sinclair Oil 44, 46, 47.
20-22-10 Prather "C," Skelly Oil 1.
18-22-11 Clopton, Simmon et al 3.
32-22-11 De Malorie "C," York State Oil 5, 6.
1-22-12 Fankhouser "C," Simmons & The Texas Co. 4.
9-22-12 Swanson, Simmons et al 7.
Holderman, Titus et al 1.
20-22-12 Freeman, Simmons et al 1.
10-22-13 Hubbard, Callahan et al 1.
25-23-8e Craft, Manhattan Oil 10.
26-23-8e Burk, The Texas Co. 1.
14-23-9e Green, Murphy et al 2.
15-23-8e Green, Skelly Oil 4, 5.
22-23-9e Teter, Davis, Hazlett et al 3.
15-23-10 Burgess, Roth, Farout & Phillips 2.
28-23-10 Thrall, Roth, Farout et al 57.
29-23-10 Thrall, Empire G. & F. 5.
30-23-10 Martindale, Manhattan et al 1.
23-23-10 Wells, Manhattan et al 1.
16-23-11 Edwards, The Texas Co. and Simmons 1.
17-23-11 Kipfer, Swartz et al 1.
4-23-13 Inthrum, Gore & Skelly Oil 1.
10-23-13 Schneider, Theta Oil 23.
15-23-13 Shadel, Mid-Cont. Pet. 10.
Shadel, Tidal Oil 16.
28-23-13 Dehlinger "A," Mid-Cont. Pet. 7.
29-23-13 Dehlinger "H," Mid-Cont. Pet. 12.
1-24-9e Cartwright, Roth, Farout and Manhattan Oil 14.
26-24-9e Halverson, Polhamus et al 2.
2-24-10 Dales, Vickers Pet. 1.
16-24-10 Mathews, Flack et al 1.
23-24-10 Edwards, Jno. Edwards et al 1.
25-24-10 Nixon, Phillips Pet. 3.
Nixon, Skelly Oil 1.
35-24-10 Edwards, Manhattan Oil et al 1.
6-24-11 Freeman "A," Crawford & McKenna 1.
19-24-11 Freeman, Manhattan Oil & Phillips 4.
Lindamood, Manhattan et al 4.
30-24-11 Wiggins "C," McGinnis et al 6.
Wiggins "E," McGinnis et al 3.
31-24-13 Dinnius, Christy et al 1.
13-25-8e Welch, Roth & Farout 2.
23-25-8e Jackson, Independent O. & G. 1.
24-25-8e Hoffman, Mid-Kansas Oil 1.
19-25-9e Ladd Acct. No. 1, Mid-Kansas Oil 5.
30-25-9e Ladd Acct. No. 4, Mid-Kansas Oil 8.
33-25-10 Hammond, Farr et al 1.
23-25-11 Hall, Skelly Oil 1.
2-26-8e Stephenson, Tidal Oil et al 12.
22-26-9e Birkett, Continental Oil 3.
24-26-9e Weirahing, Beacon Oil 5.
5-26-10 Badger, Miss. Valley Oil 1.
31-26-10 Hodgson, Griffeth & Gilbreth 1.
36-26-10 Cross, Allison & Fitzwilliams 1.
2-28-8e Edgar, Hibbard et al 1.

Shut Down

32-22-10 O'Neil, York State Oil 14.
16-23-9e Teter, Empire G. & F. 35.
19-23-9e Morris, Empire G. & F. 6.
19-23-11 Edwards, Troxell et al 1.
16-23-13 Burris, Parrish et al 1.
14-25-11 Cox, Peerless O. & R. 1.
31-25-11 Shell, Osage O. & G. 1.
7-27-10 Weaver, Griffeth et al 1.
25-27-10 Hanson, Marshall et al 1.
32-27-11 Benest, Winona O. & G. 1.
Rigs, 28; wells drilling, 76; total, 104.

KINGMAN COUNTY

Wells Drilling

9-27-6w Hemple, Phillips Pet. 1.
16-27-7w Richardson, Carter Oil 3.
34-27-7w Graber, Fleeger et al 2.
31-28-5w Beshare, Crawford & McKenna 1
11-28-6w Pagett, Marland Oil 1.
13-28-7w Greenleaf, Fleeger et al 1.
35-28-7w Yoeman, Cassoday Oil 1.
16-28-8w McKenna, Phillips Pet. 1.
21-29-9w Schultz, Phillips Pet. 1.
35-30-9w Keiming, Vickers & Stearns 1.

Shut Down

22-28-25w Linholm, Harwood & Winters 1.
1-30-6wRichards, Ozark Drlg. Co. 1.
Wells drilling, 12; total, 12.

LYON COUNTY
Rigs

25-19-10e Bibermyer, Culp et al 1.
24-21-10e Rossillion, Super Six Oil 3.
30-21-10e Jones, Theta Oil 5.
Atyeo, Transcontinental Oil 1o
31-21-10 Atyeo "A", Transcontinental Oil 8.
Atyeo, Sheedy et al 14.
33-21-13 Clemmer, Terrian, Balliere et al 1.

Wells Drilling

9-19-12e Morris, Leeward Pet. 1.
25-20-12e Stratton, Gasche & Balliere 1.
25-21-10 Bradfield, McCullough et al 2.
30-21-10 Jones, Theta Oil 4.
Atyeo, Transcontinental Oil 6, 7.
36-21-12 McCullough, Gasche & Balliere 1.

Shut Down

24-21-10e Rossillion, Super Six Oil 3.
19-21-11 Rossillion, Emerald Oil 1.
Rigs, 7; wells drilling, 9; total, 16.

MARION COUNTY
Rigs

20-19- 4e Propp, Propp et al 1.
29-19- 4e Sallee, Leeward Pet. et al 1.

Wells Drilling

8-19- 4e Propp, Youker et al 2.
24-21- 4e Jones, Sheedy et al 2.
31-21- 5e Osgood, Holl et al 1.
1-22- 3e Colbeck, Cameron Bros. 1

Shut Down

32-21- 4e Equity, Morgan et al 1.
8-22- 5e Folly, Burford & Britton 1.
Rigs, 2; wells drilling, 6; total, 8.

MONTGOMERY COUNTY

Shut Down

21-31-14 Faler, Ramler et al 1.
21-32-13 Neiman, Dunn et al 1.
36-32-14 Dryhead, Irish et al 1.
5-32-16 Brinkman, Cowell et al 1.
35-32-16 Wyberger, Bloom et al 1.
29-32-17 Hellum, Earl & Overlease 1.
35-33-16 Felt, Voice & Tabor 1.
4-33-17 Hall, Townsend et al 1.
20-33-17 Bunk, Brown & Wolf 1.
28-34-14 Owens, Phillips Pet. 1.
12-35-16 Wilson, Tex-O-Kan Oil 1.
4-35-17 Walker, Gallowye & Roberts 1.
Rigs, 0; wells drilling, 12; total, 12.

RICE COUNTY
Rigs

2-21-6w Walstein, Prairie O. & G. 1, 2.
2-19-10w Hollscher, Sparta Drlg. Co. 1.

Wells Drilling

1-19-7w Deed, Pryor & Lockhart 1
21-20-6w Barnes, Stamey et al 1

26-20-6w Johnson, Midland Oil 1.
35-20-6w Welch, Phillips Pet. 1.
2-21-6w Walstein, Phillips Pet. 1.
3-21-6w Miller, Miller-Walstein Syndicate 1.
11-21-6w Swanson, Youker et al 1.
17-21-6w Brothers, Streeter & Stearns 1.
34-20-6w Libby, Prairie O. & G. 2.
35-20-6w Welch, Prairie O. & G. 3.
Rigs, 3; wells drilling, 10; total, 13.

SUMNER COUNTY

Rigs

25-31-2e Churchill, Roxana Pet. 2, 3.
Van Sickle, Roxana Pet. 2.
Herrick, Wentz Oil 1.
24-33-2e Holt, Sinclair Oil 3.

Wells Drilling

15-30-2w Hunt, Meridal O. & G. 1.
36-30-2w Riner, Cosden O. & G. 1.
19-30-4w Kelly, Champlin O. & R. 1.
22-31-2e Clodfelter, Roxana Pet. 1.
25-31-2e Mason, Roxana Pet. 1.
Rutter, Roxana Pet. 1.
Van Sickle, Roxana Pet. 1.
25-32-1e Wirt, De Hart et al 1.
3-32-2e Rice, Stalling et al 1.
8-32-2e Reese, Marland Oil 1.
17-32-2e Morris, I. T. I. Oil 1.
Owens, Roxana Pet. 1.
Hartzell, Twin State Oil 1.
24-33-2e Holt, Sinclair Oil 2.
22-33-2w McDaniels, National Union Oil 1.
23-34-2w Douglas, Gypsy et al 1.
18-35-1e Hamilton, Amerada Pet. 1.
13-35-2w Gilbreth, Broadhurst et al 1.
34-34-2e Olson, Prairie O. & G. 2.

Shut Down

35-31-4w Stewart, Sparta Drlg. 1.
9-33-2e Wright, Marland Oil 1.
Rigs, 5; wells drilling, 21; total, 26.

MISCELLANEOUS COUNTIES

Rigs

Barton County—
28-18-12w Sooy, Rankins et al 1.

Commanche County—
23-31-18w Starlock, I. M. Rupard et al 1.

Dickinson County—
7-16- 1e Ellason, Dewey et al 1.

Morris County—
32-14- 7e Barber, Kline et al 1.

Ness County—
35-16-21w Ryersee, Bell & Sarton 1.

Pottawatomie County—
17- 9-12e Stewart, Crawford et al 1.
31- 9-12e Bratchbar, Crawford et al 1.

Smith County—
18- 5-15w Smith, Gardener 1.

Woodson County—
23-26-14e Lauck, Peerless O. & R. 3.

Wells Drilling and Shut Down
(Shut down wells indicated by *)

Barber County—
27-30-14w Pickens, Rowland et al 1*.
30-30-14w Richardson, Skelly Oil et al 1.
35-32-14w Ott, Vickers & Miller 1*.
13-33-13w Alexander, Schaffer O. & G. 1.
14-34-11w Martin, B. B. Brown et al 1*.

Barton County—
17-19-11w Smith, Huffine et al 1.
12-20-13w Ward, Everette & Wiley 1*.

Cloud County—
6- 6- 4w Murdock, Concordia O. & P. 1.

Coffey County—
8-22-14e Miller, Derby Oil 1.
29-22-14 Kaufman, Ark. Fuel Oil et al 1.
14-23-16 Jones, Fidelity Oil 1*.

Dickinson County—
23-13- 3e Jones, Leeward Pet. 1*.

Edwards County—
7-22-19w Noberwell, Edwards County Pet. 1.

Ellsworth County—
3-16- 8w Herman, Wrightsman 1.

Franklin County—
17-16-18e Owens, Smith, Thrice & Fisher 1*.
22-16-21e Parris, Leeward Pet. 1.

Geary County—
18-11- 5e Kurtze, Kirby & Wright 1.

Graham County—
23- 8-24w Taxon, Keys Bros. & Marine 1.
27- 8-25w St. John, Gulf Coast Drlg. Co. 1.

Harper County—
28-31- 9w Muir, Wakefield et al 1.
19-32- 5w Burk, Berry Pet. 1.
22-34- 6w Caton, Bu-Vi-Bar 1.

Harvey County—
10-23- 2w Grennan, Liggett et al 1.
17-24- 3w Boyle, Sinclair Oil 1.

Hodgeman County—
19-21-22w Frizzell, Spencer & Marconnette 1.

Jefferson County—
13- 9-19e Edwards, Northern Counties 1*.

Labette County—
26-32-17 Wilks, Ark. Fuel Oil 1*.
1-32-20 Tillman, Noble O. & G. 1*.
33-32-20 Burnes, W. C. Willy 1*.
1-33-17 Hornbeck, Cowell et al 1*.
5-35-20 Lipps, Wantland et al 1*.

Lincoln County—
35-10-10w Brown, Red Bank Oil 1.
19-11- 6w Stone, Scott & Collins 1*.
22-11- 6w Lewis, Pope & Lewis 1*.
36-13- 7w Paul, United Refg. Co. 1*.

Logan County—
14-14-33w Moffett, Coon et al 1*.

McPherson County—
3-18- 2w Anderson, Fowler et al 1.
29-18- 2w Anderson, Waugh & Casey 1*.

Mitchell County—
10- 7-10w Kyle, Marland Oil 1.

Morris County—
18-16- 5e Rogers, Derby Oil 1.
21-17- 7e Welcher, Bowmand & Jones 1*.
24-17- 9e Cessman, Rock Creek Oil 1*.

Nemaha County—
19- 2-11e Myers, Nemaha O. & G. 1*.

Osborne County—
19- 8-13w Bliss, Krueger et al 1.

Osage County—
3-15-15e Lease, Barber et al 1*.
27-15-16e Bailey, West et al 1*.
8-17-17e Neil, Mull. Vlt. Dev. Co. 7.

Phillips County—
15- 5-16w McQueen, Curtis & Frost 1*.
13- 5-18w McKinley, Phillips & Prairie 1.

Pottawatomie County—
11-10-12e St. Mary, Crawford et al 1*.

Reno County—
19-23- 4w Magnuson, Sheldon et al 1.
35-23- 7w Nesley, Fleeger & Mid-Kansas 1.
36-24- 7w Rexrond, Mississippi Valley Oil 1.
24-24- 8w Smith, Tallman & Shaer 1*.
9-25- 7w High, Cassoday Oil 1.
7-26- 7w Stevens, Hopper et al 1*.
23-26- 9w Dutton, T. B. Slick 1.

Riley County—
26-10- 6e Marks, Pawnee O. & G. 1*.
20-10- 7e Thierer, Youker et al 1*.

Rooks County—
7- 8-20w Saindon, Keys Pet. 1.
35-10-19w Casey, Findless et al 1.

Rush County—
10-18-16w Moore, Morgan et al 1*.

Russell County—
13-11-3w Pospishal, Kreuger et al 1.
32-11-15w Dodge, Derby Oil et al 4.
Booth, Mid-West Refg. 34.
Both, Snowden & McSweeney 4.
14-12-13w Wilson, Wilcox O. & G. 1.
18-12-15w Mermis, Valerius O. & G. 2.
20-13-15w Sloan, Keys Pet. 1.
6-14-12w Lindsay, Kettle & Shoemaker 1*.
5-14-15w Dortland, Mid-West Refg. Co. 36.

Saline County—
29-14-2w Davis, L. S. Johnson et al 1*.
26-15-2w Sheldon, Brown & Woodward 1.
15-15-4w Holquest, Thrall et al 1*.

Sedgwick County—
6-25-1e Poff, Boyle et al 1*.
9-25-2e Harrison, Smith & Keller 1*.
35-26-1e Jaden, Wichita O. & G. 1*.
7-26-2e Mills, Lamson et al 1.
17-29-1e Howell, Carr, Hartman & Shaer 1.
2-29-2e Flemming, Higgins 1.

Seward County—
14-33-33w Son, Wilson et al 1.

Shawnee County—
36-11-13e Wenner, Holl et al 1.

Stafford County—
22-22-11w Richardson, Randall & Johnson 1*.

Wabaunsee County—
15-13-12e Henderson, Williams et al 1*.

Wilson County—
3-27-14e Daniels, Allison & Fitzwilliams 1.
22-28-13 Thompson, Price et al 1*.
29-30-17e Smally, West & Williams 1*.

Woodson County—
6-24-14e Wintersheld, Pure Oil 11.
35-24-13 Johnson, Altomite O. & G. 1.
12-25-14 Hunt, Alter et al 1*.
33-25-14 Colburn, Stover Drlg. Co. 1.
13-26-14 Daniels, Burford & Brimm 1.
23-26-14 Town, Peerless O. & R. 4.
24-26-14 Lauber, McCollough et al 1*.
Lauber, McCollough et al 2.
Rigs, 9; wells drilling, 95; total, 104.

NORTH AND WEST TEXAS

Summary of Wells Completed

County—	Comp.	Prod.	Dry	Gas
West Texas				
Crane	2	35	1	0
Crockett	1	0	1	0
Culberson	1	0	1	0
Howard	6	238	2	0
Mitchell	8	420	2	0
Reagan	9	1,988	3	0
Reeves	1	0	1	0
Runnels	1	0	1	0
Sterling	1	0	1	0
Taylor	1	0	1	0
Upton	12	2,253	9	0
Total August	43	4,937	14	0
North Texas				
Archer	89	3,558	35	0
Baylor	3	0	3	0
Brown	82	6,036	31	0
Callahan	17	1,030	4	1
Clay	9	45	8	0
Coleman	13	60	9	1
Comanche	1	0	1	0
Cooke	5	530	1	0
Eastland	21	492	12	2
Erath	1	0	1	0
Glasscock	1	0	1	0
Hardeman	1	0	1	0
Jack	11	30	9	0
Montague	34	2,482	2	1
Palo Pinto	2	0	2	0
Shackelford	24	2,130	11	0
Stephens	11	223	4	1
Throckmorton	3	2,366	2	0
Wichita	52	1,234	23	0
Wilbarger	61	4,583	10	0
Young	49	1,700	17	0
Total North Texas	490	26,509	187	6
Grand Total North and West Texas	533	31,446	201	6
Grand Total July	651	45,957	276	7
Difference	118	14,511	75	1

Summary of Wells Drilling for August, 1926

County—	Rigs	Dig.	S.D.	Ttl
North Texas				
Archer	6	51	10	67
Brown	9	79	20	108
Callahan	7	23	4	34
Coleman	3	21	11	35
Eastland	6	29	11	46
Jack	0	11	4	15
Montague	7	38	4	49
Shackelford	7	61	10	78
Stephens	4	20	13	37
Throckmorton	2	18	3	23
Wichita	1	38	6	45
Wilbarger	14	59	21	94
Young	5	19	7	31
Miscellaneous	11	34	33	78
Total	82	501	157	740
West Texas				
Crane	4	11	4	19
Crockett	4	12	3	19
Mitchell	2	13	1	16
Reagan	8	36	3	47
Upton	15	55	1	71
Miscellaneous	20	38	34	92
Total	53	165	46	264
Grand Total August	135	666	203	1,004
Grand Total July	122	588	177	887
Difference	13	78	26	117

NORTH TEXAS

ARCHER COUNTY

W. E. Allison, Alexander & Barnes 1 .. dry
Pace, Allday Oil Co. 1 .. dry
Tarbeville, American Refg. Co. et al 1 .. 125
Oldham, Atlantic Oil Prod. Co. 5 .. 65
Perkins et al, G. B. Brown 2 .. 55
W. T. Hutchenson, Caldwell & Consolidated Oil Co. 5 .. 80
W. T. Hutcheson, Caldwell & Consolidated Oil Co. 6 .. dry
Rogers, Continental Oil Co. 9 .. 20
W. T. Browning & Co., Cook & Reeder 1
Kunkel, Cook & Reeder 2 .. 125
C. C. Conner, Cosden-Consolidated Oil Co. 1 .. dry
J. R. Parkey, Empire G. & F. Co. 1 .. 163
Thomas, Gates et al 3 .. 75
Thomas, Gates et al 4 .. 75
Thomas, Gates et al 5 .. 70
Thomas, Gates et al 6 .. 50
H. O. Prideaux, Golding, Cochrane & Cline 2 .. 4
C. L. Abercrombie-A, Gulf Prod. Co. 2 .. 12
G. Beasler et al, Gulf Prod. Co. 1 .. dry
A. J. Eckard, Gulf Prod. Co. 2 .. dry
M. W. Jackson-A, Gulf Prod. Co. 12 .. 12
H. L. Ward et al "C", Gulf Prod. Co. 1 dry
I. H. Kunkel, Humble O. & R. Co. 1 .. 6
Hamilton, Humble O. & R. Co. 15 .. dry
Andrews, Johnson & Harris 1 .. dry
Turbeville, T. H. Jones 1 .. 25
Prideaux, Kell & Kruger 4 .. 100
Slopansky, King & Looney 1 .. dry
L. F. Wilson-N, Kentucky Oil Corp. 2.. 35
Slopansky, King & Looney 2 .. dry
H. O. Prideaux, Lewis Oil Corp. 4 .. dry
H. O. Prideaux, Lewis Oil Corp. 5 .. 10
H. O. Prideaux, Lewis Oil Corp. 6 .. dry
Frank Deskin, Maer & Staniforth 1 .. dry
Tarbeville, Marland Oil Co. 1 .. dry
Little et al, Magnolia Pet. Co. 7 .. 25
Thomas-B, Marland Oil Co. 1 .. 45
Thomas-B, Marland Oil Co. 2 .. 25
Mrs. J. H. Turbeville, Marland Oil Co, 1 80
L. F. Wilson-A, Marland & Trahan 1 .. dry
Deitrick, Murchison & Fain 4 .. dry
Deitrick, Murchison & Fain 5 .. 10
Logan-B, Murchison Fain Oil Co. 2 .. 44
Logan-D. Murchison & Fain Oil Co. 1 .. dry
Kunkel, M. & V. Oil Co. 7 .. 65
Kunkel, M. & V. Oil Co. 8 .. 25
Kunkel, M. & V. Oil Co. 9 .. 7
Skinner & Smith, Muse Robinson 1 .. dry
Parrish Bros., McCorty Oil Co. 1 .. 55
Dilday-Wilson, McCorty Oil Co. 2 .. 55
Parish Bros., McCorty Oil Co. 3 .. 40
Abercrombie & Taylor, Pandem Oil Corp. 1 .. 14
L. L. Hudson, Pandem Oil Corp. 2 .. 12
W. H. Thomas, Pandem Oil Corp. 4 .. 4
Thomas, Pandem Oil Corp. 5 .. 80
Thomas, Pandem Oil Corp. 6 .. 35
Threet, Pandem Oil Corp. 1 .. dry
Nowell, Panhandle Refg. Co. 1 .. dry
Mrs. J. E. Parish, Payne et al 2 .. 35
E. W. Williams, Phillips Pet. Co. 1 .. dry
R. O. Prideaux, Plains Prod. Co. 2 .. 5
Turbeville, Plains Prod. Co. 1 .. dry
Prideaux, Pitts et al 1 .. dry
Baggett, Reed, H. Kerbow et al 1 .. 5
Turbeville, Richardson Oil Corp. 1 .. dry
Abercrombie, Roxana Pet. Corp. 3 .. 50
Abercrombie, Shaw & Rathke 2 .. 10
Wilson-B, Shaw et al 8 .. 7
J. H. Turbeville-A, Simms Oil Co. 2 .. 215
Turbeville-A, Simms Oil Co. 4 .. 110
Wilson, Staley & Wynne and Humble O. & R. Co. 3 .. dry
Stonewall-Jackson Camp, Sun Oil Co. 1 dry
Turbeville-C, The Texas Company 1 .. 125
W. R. Brown, The Texas Company 1 .. dry
L. F. Wilson-B, The Texas Company 4 28
L. F. Wilson-B, The Texas Company 5 40
Hamilton, Texhoma O. & G. Co. 14 .. 102
L. H. Farmer-B, Tidal Oil Co. 1 .. dry
Prideaux-B, United Producers 2 .. 15
Turbeville-A, American Refg. Co. 2 .. 240
J. E. Parrish-A, Bridwell & Heydrick 2 15
Hutcheson, Caldwell & Consolidated Oil Co. .. 7
L. F. Wilson, J. R. Elliott 3 .. dry
Turbeville, Harris & Johnson et al 1 .. dry
Dale Bros., W. H. Kerbow et al 1 .. dry
W. F. Parrish-B, Magnolia Pet. Co. 10 20
L. F. Wilson-C, Shappell Oil Co. 4 .. dry
Henry Ford, F. S. Whitman et al 2 .. dry
Turbeville-A, Simms Oil Co. 5 .. 800

Wells completed .. 89
Production .. 3558
Dry .. 35

BROWN COUNTY

Fry, Amerada Pet. Corp. 1 .. 35
R. L. Holt, Anderson & Shults 1 .. dry
Ferguson, Arkansas Fuel Oil Co. 1 .. dry
Sparks, Barnsdall Oil Corp. 1 .. dry
Graham estate, Bowers Oil Co. 1 .. dry
Boysen, Boysen & Ramsier 1 .. dry
Stapp, Carter et al 1 .. dry
R. G. Hewly, Christie et al 1 .. dry
East-Westerman, J. S. Cosden Oil Co. 1 25
Church lot, Curry & Moore 1 .. dry
Kilgore Bros., Curry & Moore 2 .. 10
Wooldridge, Curry & Moore 1 .. 200
Wooldridge, Curry & Moore 2 .. 40
Graham estate, Douglas et al 1-A .. dry
J. T. Cason, Dozier et al 1 .. 97
J. J. Smith, Empire G. & F. Co. 1 .. dry
Sears, Evans et al 1 .. dry
White, Gibson Oil Corp. 1 .. 50
Henson, Gillespie Oil Co. 3 .. 15
A. B. Teston, Gilman & McMurray 9 .. 60
Gunn, Gunn Prod. Co. 8 .. 25
Boysen, Boysen & Ramsier 3 .. 20
Kilgore Bros., P. L. Hoffman 4 .. 15
Arledge, J. K. Hughes Dev. Co. 14 .. 15
J. H. Allen-B, Humble O. & R. Co. 9 .. 3
A. Armstrong, Humble O. & R. Co. 1 .. dry
Foster, Humble O. & R. Co. 2 .. 200
Foster, Humble O. & R. Co. 3 .. dry
Fry, Humble O. & R. Co. 1 .. 84
Fry, Humble O. & R. Co. 2 .. 100
Hodnett, Humble O. & R. Co. 5 .. 100
Kilgore Bros., Humble O. & R. Co. 1 dry
Kilgore Bros., Humble O. & R. Co. 8-B 150
Kilgore Bros., Humble O. & R. Co. 3-C 200
Kilgore Bros., Humble O. & R. Co. 4-C 60
Kilgore Bros., Humble O. & R. Co. 2-D 100
J. C. Kilgore, Humble O. & R. Co. 3-B 356
J. C. Kilgore, Humble O. & R. Co. 6-B 40
E. P. and W. H. Kilgore, Humble O. & R. Co. 6-B .. 750
E. P. and W. H. Kilgore, Humble O. & R. Co. 7-B .. 100
E. P. and W. H. Kilgore, Humble O. & R. Co. 11-B .. 75
E. P. and W. H. Kilgore, Humble O. & R. Co. 5-C .. 20
E. P. and W. H. Kilgore, Humble O. & R. Co. 3-D .. 10
E. P. and W. H. Kilgore, Humble O. & R. Co. 5-D .. 40
A. Leatherwood, Humble O. & R. Co. 5 .. 5
Eddington, Enbright et al 1 .. dry
Foster, Kane Prod. Co. 1 .. 200
Cook, Keough Bros. 1 .. dry
Fry, William Lester 2 .. 150
Fry, William Lester 3 .. 220
Smith, Lightfoot et al 1 .. dry
Foster, McKenna Oil Co. 2 .. 480
Foster, McKenna Oil Co. 3 .. 250
Foster, McKenna Oil Co. 5 .. 600
Foster, McKenna Oil Co. 9 .. dry
W. M. Wooldridge, McLester Oil Co. 1-A dry
W. M. Wooldridge, McLester Oil Co. 6 .. 75
Newton, Mendenhall et al 12 .. dry
Suttles, Midwest Exploration Co. 8 .. 15
Suttles, Midwest Exploration Co. 10 .. 20
Purcell, Mimms et al 1 .. dry
W. E. Hester, G. P. Mitchan 1 .. dry
Lehman, J. W. Moore 1 .. dry
Eubanks, Murphy 1 .. dry
Westerman, Pandem Oil Corp. 5 .. dry
J. H. Prater, Phillips Pet. Co. 3 .. 40
Mrs. A. Armstrong, Prairie O. & G. Co. 2 .. dry
W. B. Trammel, Prairie O. & G. Co. 2 .. 10
Wooldridge, Prairie O. & G. Co. 7 .. 105
Mrs. M. J. Suttles, C. M. Root et al 4 .. 20
L. King, Roxana Pet. Corp. 1 .. dry
Eubanks, States Oil Corp. 1 .. T.A.
Eddington, The Texas Company 6 .. 142
Hickman, The Texas Company 1 .. 400
Roe, The Texas Company 1 .. 20
Roe, Troutt et al 1 .. dry
Teston, Valley Oil Co. 3 .. dry
J. W. Newton, West and H-Y Oil Co. 8 15
J. W. Newton, West and H-Y Oil Co. 9 30
Keller, Williamson et al 2 .. dry
Keller, Williamson et al 3 .. 140
W. M. Wooldridge, F. D. Williamson et al 1 .. 100

Wells completed .. 52
Production .. 6026
Dry .. 31

CALLAHAN COUNTY

Long, Amerada Pet. Corp. 2 .. 100
Long, Amerada Pet. Corp. 3 .. 50
Long, Brown & Co. 1 .. 80
Long, Brown & Co. 2 .. 40
E. F. Bond, Cranfill & Reynolds 1 .. 90
Henderson, Cranfill & Reynolds 2 .. 150
Ellis, French & Lewis 1 .. dry
Jackson, Goodloe & Duffy 1 .. dry
Cutbirth, Mississippi Valley Oil Co. 1 dry
Hurling, Moore 1 .. dry
Bond, Prairie O. & G. Co. 3 .. 60
Cunningham, Prairie O. & G. Co. 4 .. 75
Cunningham, Prairie O. & G. Co. 5 .. 100
D. H. Derrington, Prairie O. & G. Co. 2 175
J. B. McDonough, Prairie O. & G. Co. 9 20
L. A. McConough, T. B. Slick 1 .. gas
Baum, Wilson 1 .. 90

Wells completed .. 17
Production .. 1030
Dry .. 4
Gas .. 1
Gas production .. 250,000

CLAY COUNTY

Bunting, W. J. Green Oil Corp. 1 .. dry
J. F. Fry, W. J. Gresham et al 1 .. dry
C. M. Worsham, Gulf Prod. Co. 7 .. dry
J. G. Mullens, E. M. Jones 1 .. dry
Eddington estate, Larkin & White 1 .. dry
Holloway, Lone Star Gas Co. 21 .. dry
Holloway, Lone Star Gas Co. 22 .. dry
Culbertson, Western Oil Corp. 1 .. 45
T. A. Matlock, Western Oil Corp. 1 .. dry

Wells completed .. 9
Production .. 45
Dry .. 8

COLEMAN COUNTY

Campbell, Bartlett 1 .. gas
Dibrell, Burke-Greis Oil Co. 4 .. dry
W. A. Ellis, S. C. Canary et al 1 .. gas
J. C. Dibrell, Kirby Pet. Co. 3 .. 10
Lowe, McChesney 1 .. dry
Dibrell, Midwest Exploration Co. 5-A dry
Cox, Neely et al 1 .. dry
Hubbard, Root 1 .. dry
Mrs. M. E. Timmins, Ross & Cooter 1 .. dry
Stewardson, Ross & O'Conner 1 .. dry
Deavers, Van Eman et al 1 .. dry
J. C. Dibrell, Western Oil Sales Corp. 2 50
Hutchings, Wright & McNallen 1 .. dry

Wells completed .. 13
Production .. 69
Dry .. 9
Gas .. 1
Gas production .. 4,250,000

COMANCHE COUNTY

Capers, Caddell & Davis 1 .. dry

COOKE COUNTY

J. A. Dennis, Hoosier Oil Co. 1 .. 80
A. Hyman, C. C. Lanier et al 3 .. 185
School lot, Maer & Staniforth et al 1 .. dry
A. Hyman, Sun Oil Co. 1 .. 170

Wells completed .. 5
Production .. 530
Dry .. 1

EASTLAND COUNTY

Grove, Adams et al 1 .. 150
Garrett, Corzelius Bros. 1 .. dry
L. Kinnebrew, Gulf Prod. Co. 7 .. gas
W. C. McFadden, Gulf Prod. Co. 1 .. dry
J. D. Parsons, Gulf Prod. Co. 2 .. 47
J. D. Parsons, Gulf Prod. Co. 3 .. 40
J. D. Parsons, Gulf Prod. Co. 4 .. 30
J. D. Parsons, Gulf Prod. Co. 5 .. dry
J. D. Parsons, Gulf Prod. Co. 6 .. 170
J. D. Parsons-A, Gulf Prod. Co. 5 .. 35
J. D. Parsons-A, Gulf Prod. Co. 6 .. dry
Murrell, Hamon & Conley 1 .. dry
Davenport, Hart Bros. 1 .. dry
S. H. Parsons, Humble O. & R. Co. 2 .. dry
S. H. Parsons, Humble O. & R. Co. 3 .. dry
Parsons, Humble O. & R. Co. 5 .. dry
McFadden, Panhandle Refg. Co. 1 .. dry
W. U. Fox, Shinholt & Heslip 1 .. gas
Wright, Smith et al 2 .. dry
Davenport, States Oil Corp. 4 .. 20
Fee (W. Van Norman), Texas Pacific Coal & Oil Co. 1 .. dry

Wells completed .. 21
Production .. 492
Dry .. 12
Gas .. 2
Gas production .. 1,740,000

ERATH COUNTY

S. Koonsman, Geo. Davisson et al 1 .. dry

GLASSCOCK COUNTY

W. H. Sparkman, Case & Hoover 1 .. dry

HARDEMAN COUNTY

Evans, Staley, Wynne et al 1 .. dry

JACK COUNTY

H. B. Bowen, Baytex Oil Co. 1 .. dry
Patton, Baytex Oil Co. 1 .. dry
M. L. Bloodworth-B, Cowboy Oil Co. 1 dry
Gillespie, Crabb, McNeil et al 1 .. dry
Snedeker, Guthrie et al 5 .. 15
Snedeker, Hester, Hawkins & Staley 1 dry
Snedeker, Hester, Hawkins & Staley 2 15
Hoefel, McElreath, Suggett & Phillips 1 dry
Hanna, Oldham et al 2 .. dry
Garner, Wallace-Nichols 1 .. dry
Rollins, Wellman et al 1 .. dry

Wells completed .. 11
Production .. 30
Dry .. 9

MONTAGUE COUNTY

N. J. Howard, Arco Oil Co. 1 .. 35
J. E. Lemon, Benton-Woods, Lesh & McCall 1 .. dry
J. W. Maddox, Farlan Oil Co. 1 .. 105
Howard-B, F. H. E. Oil Co. 1 .. 35
R. Hinds-A, F. H. E. Oil Co. 7 .. 50
Maddox, Gracey-Kahle et al 1 .. 80

Maddox, Harris & Simons 2 110
R. Hinds, Humble O. & R. Co. 11 100
Maddox, Humble O. & R. Co. 2 200
J. W. Maddox, Humble O. & R. Co. 3 .. gas
Maddox, Humble O. & R. Co. 5 20
Maddox, Newblock Oil Co. 3 115
Crow, Pure Oil Co. 1 60
Oldham-A, Pure Oil Co. 4 30
Bouldin, The Texas Company 1 ..... T.A.
J. A. Gist-A, The Texas Company 13 .. 45
Gist-A, The Texas Company 14 7
Gist-A, The Texas Company 15 40
Gist-A, The Texas Company 17 45
Gist-A, The Texas Company 19 55
H. C. Gist-B, The Texas Company 2 .. 40
Howard et al-B, The Texas Company 1 40
J. E. Martin, The Texas Company 1 .. 160
Martin, The Texas Company 2 40
Oldham et al, The Texas Company 10 .. 210
Oldham et al, The Texas Company 11 .. 205
Oldham et al, The Texas Company 12 .. 162
Oldham et al, The Texas Company 13 .. 115
Oldham et al, Texhoma O. & R. Co. 6 .. 50
Howard et al, Texhoma O. & R. Co. 7 .. 32
Howard et al-A, Texhoma O. & R. Co. 8 40
N. J. Howard et al, Texhoma O. & R. Co. 9 30
J. W. Rowland et al, Texhoma O. & R. Co. and Republic Prod. Co. 3 141
Rowland estate, Texhoma O. & R. Co. and Republic Prod. Co. 4 115

Wells completed 34
Production 2482
Dry 2
Gas 1
Gas production 21,000,000

PALO PINTO COUNTY

Robinson, Moore & Snehold 3 ..... dry
Dalton, Upham Gas Co. (formerly M. Dalton) 1 ..... T.A.

SHACKELFORD COUNTY

Colbert, Domestic Oil Co. 1 ..... dry
Reynolds, Heck et al 3 ..... D&A
Cook, Humble O. & R. Co. 7 150
Davis, Independent O. & G. Co. 1 15
Powers, Jones 1 ..... dry
Midkiff, Magnolia Pet. Co. 1 ..... dry
Davis, Marland Oil Co. 1 ..... dry
Newell, Merry Bros. and Perini 1 .. dry
F. W. Alexander, Milham Oil Corp. 1 dry
Davis, Motor 1 25
Snyder, Moutray Oil Co. 3-B ..... dry
Matthews, Overfees Oil Co. 2 ..... dry
Cook, Roeser & Pendleton 1-A-90 ... dry
Cook, Roeser & Pendleton 13-A-84 .. 100
Cook, Roeser & Pendleton 14-A-84 .. 400
Cook, Roeser & Pendleton and Marland Oil Co. 16-A-84 100
Cook, Roeser & Pendleton and Marland Oil Co. 17-A-84 100
Cook, Roeser & Pendleton and Marland Oil Co. 19-A-84 200
Cook, Roeser & Pendleton and Marland Oil Co. 7-A-85 ..... dry
Cook, Roeser & Pendleton 7-B-84 860
Cook, Roeser & Pendleton 8-B-84 150
W. I. Cook, Roeser & Pendleton 10-B-85 15
Cook, Roeser & Pendleton 13-B-85 15
Cook, Roeser & Pendleton 16-B-85 60

Wells completed 24
Production 2130
Dry 11

STEPHENS COUNTY

Houston, Edison et al 2 5
Standford, Humble O. & R. Co. 1 ..... dry
Vick, Law et al 1 ..... dry
Glasscock, Meyer & Kramer 1 ..... gas
Hill, Mid-Kansas O. & G. Co. 18 48
Lee, Mid-Kansas O. & G. Co. 1 ..... dry
Cunningham, Mid-Tex Oil Co. 6 90
Head, Mook-Texas Oil Co. 5 30
Parks, Texas Fidelity Oil Co. 2 ..... dry
Binney, Texas Pacific C. & O. Co. 63 .. 20
Chas. Binney, Texas Pacific C. & O. Co. 66 40

Wells completed 11
Production 233
Dry 4
Gas 1
Gas production 250,000

THROCKMORTON COUNTY

E. S. Cook, Associated Pet. Co. 1 .. dry
E. H. and J. O. Davis, Godley & Sowell 1 ..... dry
Stubblefield, Humble O. & R. Co. 1 ..2366

WICHITA COUNTY

Kemp & Kemper, Block 41 Oil Co. 10 .. 6
Jennings-B, Bullington, Lee & Pendleton 5 ..... dry
Overall, Camp O. & G. Co. 1 ..... dry
Ward & Todd, Clark et al 5 245
J. L. and T. J. Waggoner, Culberson Co. Co. 41 40
Waggoner, Culberson Co. 42 35
Jennings, Dale Oil Corp. 25 ..... J. A.
Burnett, Easton et al 1 ..... dry
Murrey, Electra, Gulf Oil Co. 9 20
Murrey, Electra, Gulf Oil Co. 10 ..... dry
Goetze, Evangeline Pet. Co. ..... dry
G. Jennings-A, Gulf Prod. Co. 18 ..... dry
Potter-Lewis, Gulf Prod. Co. 10 3
Marshall, Hawkins, Hester et al 1 ... J.A.
H. B. Hines, J. W. Hooser 4 8
Hines-A, Humble O. & R. Co. 3 ..... dry
Lindsey, Humble O. & G. Co. 1-C ..... dry
Waggoner Bros., Hunter 11 3
Waggoner Bros., Hunter 12 15
Waggoner Bros., Hunter 13 30
Waggoner Bros., Hunter 14 22
Waggoner Bros., Hunter 15 25
Waggoner Bros., Hunter 16 40
Fassett, Klumpp, Dillard & Bowen 2 .. dry
Guthrie, McBroom et al 1 ..... dry
Griffin, McDonald et al 1 ..... dry
Beach, Magnolia Pet. Co. 13 12
Douglas-McDonnald, Magnolia Pet. Co. 11 ..... dry
Reilly, Magnolia Pet. Co. 129 20
Reilly, Magnolia Pet. Co. 130 103
Warren, Magnolia Pet. Co. 10 ..... dry
Harrison, O'Neil Oil Co. 1 20
A. B. Edgerly-A, George Pace 5 ..... J.A.
Fisher Pet. Investment Co. 2 35
Allen & Kemp-D, Petroleum Prod. Co. 4 80
Bywaters, Red River Oil Co. 80 142
J. L. Powell & R. R. Ridgeway 6 5
T. F. Mitchell, D. M. Ross et al 14 20
Eads, Rubsam, Hunter et al 1 ..... dry
W. D. McClure, Rubsam, Hunter et al 3 40
McClure-C, Rubsam & Hunter 1 10
Kemp & Kemper, Ruff and Wilson Drlg. Co. 1 ..... dry
Henson, Ryan Pet. Co. 3 ..... dry
G. L. Nance, Ryan Pet. Co. 75 35
G. L. Nance, Ryan Pet. Co. 77 ..... dry
Nance, Ryan Pet. Co. 78 20
Dutton, Simms Oil Co. 3 100
Dutton, Simms Oil Co. 4 45
W. H. Chilson, E. J. Stump & Co. 1 .. dry
Chilson, Stump et al 2 45
Burnett-M, Texhoma O. & R. Co. 7 ... dry
Fisher, Texhoma O. & R. Co. 1 ..... dry

Wells completed 52
Production 1234
Dry 23

WILBARGER COUNTY

Waggoner, Beatty 2 60
Dill, Pridwell & Heydelck 12 13
Waggoner, Bridwell & Heydrick et al 1 dry
Waggoner, Burton 1 ..... T.A.
Richardson, Empire G. & F. Co. 5 15
Stephens, Empire G. & F. Co. 37 ..... dry
Stephens, Empire G. & F. Co. 38 30
Stephens, Empire G. & F. Co. 39 ..... dry
Stephens, Empire G. & F. Co. 42 58
Stephens, Empire G. & F. Co. 43 53
Stephens, Empire G. & F. Co. 44 59
W. H. Stephens, Empire G. & F. Co. 47 15
Bond-B, Humble O. & R. Co. 15 18
Stephens, Humble O. & R. Co. 12 18
Stephens, Humble O. & R. Co. 14 35
W. H. Stephens, Humble O. & R. Co. 48-A 65
Waggoner-H, Humble O. & R. Co. 14 .. 16
W. T. Waggoner-I, Humble O. & R. Co. 5 8
W. T. Waggoner-K, Humble O. & R. Co. 6 200
W. T. Waggoner-K, Humble O. & R. Co. 7 100
W. T. Waggoner-K, Humble O. & R. Co. 8 100
W. T. Waggoner-K, Humble O. & R. Co. 9 28
W. T. Waggoner-N, Humble O. & R. Co. 3 20
W. T. Waggoner-O, Humble O. & R. Co. 10 30
W. T. Waggoner-O, Humble O. & R. Co. 11 40
W. T. Waggoner-P, Humble O. & R. Co. 1 25
Fee, Magnolia Pet. Co. 73 13
W. R. Piper, Magnolia Pet. Co. 50 40
Summer, Magnolia Pet. Co. 54 9
Waggoner-D, Milham Corp. 1 ..... dry
Waggoner-H, Milham Corp. 10 140
Waggoner-J, Milham Corp. 1 ..... dry
Waggoner-L, Milham Corp. 2 162
Waggoner-L, Milham Corp. 8 116
Waggoner-L, Milham Corp. 9 162
Waggoner-L, Milham Corp. 10 240
W. T. Waggoner-L, Milham Corp. 11 .. 150
Waggoner-L, Milham Corp. 15 315
Waggoner, Miller Oil Co. 2 ..... dry
W. T. Waggoner-A, Phillips Pet. Co. 13 150
Waggoner-I, Phillips Pet. Co. 4 7
Waggoner-Q, Phillips Pet. Co. 5 25
Waggoner-Q, Phillips Pet. Co. 6 247
W. T. Waggoner-T, Phillips Pet. Co. 4 20
Waggoner-T, Phillips Pet. Co. 5 460
W. T. Waggoner-T, Phillips Pet. Co. 7 60
Waggoner-BB, Phillips Pet. Co. 1 23
Waggoner-HH, Phillips Pet. Co. 3 130
Waggoner-NN, Phillips Pet. Co. 6 50
Waggoner-PP, Phillips Pet. Co. 2 13
W. T. Waggoner-QQ, Phillips Pet. Co. 8 120
W. T. Waggoner-UU, Phillips Pet. Co. 1 68
W. T. Waggoner-UU, Phillips Pet. Co. 2 25
W. T. Waggoner-UU, Phillips Pet. Co. 3 230
W. T. Waggoner-UU, Phillips Pet. Co. 4 225
Waggoner-WW, Phillips Pet. Co. 3 .. 200
Waggoner-B, Rondeau 1 ..... dry
Condon, Roxana Pet. Corp. 1 ..... dry
Waggoner-D, Roxana Pet. Corp. 1 20
Waggoner, Tidal Oil Corp. 1 ..... dry
W. T. Waggoner-A, Waggoner Refg. Co. 4 160

Wells completed 61
Production 4583
Dry 10

YOUNG COUNTY

Stewart, Appleby et al 1 ..... dry
H. Ford, Atkinson & Sandefer 2 109
Rachuig-B, Atlantic Oil Prod. Co. 8 .. 350
Beardon, Bridwell & Heydrick 9 75
Williams, Bridwell & Mayfield 2 ..... abd
Benson, Burton and Texhoma O. & R. Co. 2 49
Benson, Burton and Texhoma O. & R. Co. 3 10
Benson, Burton and Texhoma O. & R. Co. 4 20
Nall, Camp O. & G. Co. 1 ..... dry
Davis, Clark et al 1 40
Moore, Commercial Pet. Co. 1 ..... dry
Benson-B, Cosden and Consolidated Oil Co. 1 ..... dry
Holt, Davis et al 1 ..... dry
Logan, Evans et al 2 25
Leberman, Jeffers & Jeffers 2 ..... dry
Benson, A. W. Johnson 1 ..... dry
Snyder, McElreath, Suggett & Phillips 3 dry
Benson, Madden et al 2 165
Benson, Reed, Madden et al 3 15
Benson, Madden et al 4 8
Little et al, Magnolia Pet. Co. 6 10
Little et al, Magnolia Pet. Co. 7 8
Watson, Nash & Windfohr 2 ..... dry
Whitehead, Pandem Oil Corp. 4 100
Whitehead, Pandem Oil Corp. 5 40
Gragg, Reed & Anderson 3 ..... dry
Gack, Reed et al 4 12
R. L. Watson, Reed & Wooten 2 25
Jones, Riggs et al 2 5
E. Rogers, Robert Oil Corp. 8 65
E. Rogers, Robert Oil Corp. 9 75
E. Rogers, Robert Oil Corp. 10 60
Stewart, Ruff et al 1 130
Calvin, Ryan et al 1 ..... dry
W. W. Gregg, Simms, Cosden and Consolidated Oil Co. 1 25
W. W. Gregg, Simms, Cosden and Consolidated Oil Co. 2 ..... dry
Dailey, Stafford & Hayes 5 10
Deltrich, Sun Oil Co. 9 40
Deltrich, Sun Oil Co. 10 ..... dry
Deltrich, Sun Oil Co. 11 ..... dry
A. Beardon, The Texas Company 12 ... dry
A. Beardon, The Texas Company 13 ... 30
A. Beardon, The Texas Company 14 ... 175
Stewart, The Texas Company 1 42
Stewart, The Texas Company 2 45
Benson-A, Tidal Oil Co. et al 4 80
Benson-A, Tidal Oil Co. et al 5 20
Benson-A, Tidal Oil Co. et al 6 12
Benson-A, Tidal Oil Co. et al 7 25
Brainard, Webster et al 1 ..... dry

Wells completed 49
Production 1700
Dry 17

WEST TEXAS COMPLETIONS
For August, 1926

CRANE COUNTY

Connell, J. S. Cosden 1 ..... dry
Durham, Marland Oil Co. 1 35

Completed 2
Production 35
Dry 1

CROCKETT COUNTY

Shannon, Magnolia Pet. Co. 1 ..... dry

CULBERSON COUNTY

Mrs. G. H. Quaid, Pure Oil Co. 1 ..... dry

HOWARD COUNTY

W. T. Scott, Deep Rock Oil Co. 1 ..... dry
Otis Chalk, Lockhart & Co. 1 60
Otis Chalk, Magnolia Pet. Co. 1 88
Otis Chalk, Marland Oil Co. 1 50
Otis Chalk, Owens & Sloan 2 40
Roberts, Transcontinental Oil Co. 1 ... dry

Wells completed 6
Production 238
Dry 2

MITCHELL COUNTY

C. M. Adams, Lse. 3, California Co. 2 .. 22
C. M. Adams, Lse. 2, California Co. 3 .. 64
W. L. Foster, Lse. 1, California Co. 1 .. 107
H. C. Miller, Lse. 4, California Co. 6 .. 40
J. D. Pettifils, Lse. 1, California Co. 1 . 117
C. M. Adams, Magnolia Pet. Co. 5 70
P. C. Coleman, Magnolia Pet. Co. 1 ... dry
Kloh & Rumsey, Magnolia Pet. Co. 1 ... dry

Wells completed 8
Production 420
Dry 2

REAGAN COUNTY

University, Big Lake Oil Co. 57 ..... abd
University, Big Lake Oil Co. 70 350
University, Big Lake Oil Co. 74 834
University, Big Lake Oil Co. 84 425
Sawyer Cattle, Marland Oil Co. and Mascho 1 ..... dry
University, Texon O. & L. Co. of Texas 1 ..... dry
University, Group 1, Texon O. & L. Co. 4-A 184
University, Group 1, Texon O. & L. Co. 38 120
University, Group 1, Texon O. & L. Co. 6-A 75

Wells completed 9
Production 1988
Dry 3

REEVES COUNTY

Kloh & Rumsey, Humble O. & R. Co. 1 dry

RUNNELS COUNTY

Krubber, Sillix & Rainwater 1 ..... dry

STERLING COUNTY

J. T. Davis, The California Co. 1 ..... dry

TAYLOR COUNTY

Norwood, Sanger O. & R. Co. 1 ..... dry

UPTON COUNTY

A. S. Burleson, Dixie Oil Co. 4 78
A. S. Burleson, Dixie Oil Co. 6 45
E. S. Hughes, Dixie Oil Co. 5 300
Emma Wooley, Independent O. & G. Co. 1 119
A. S. Burleson, Marland Oil Co. 9 40
A. S. Burleson, Marland Oil Co. 10 240
Mrs. M. L. Baker, Republic Prod. Co. 3 75
Sanger Bros., Marland Oil Co. 7 85
Sanger Bros., Marland Oil Co. 8 280
R. H. Estep, Roxana Pet. Corp. 1 211
Burleson, Sun Oil Co. 1 30
R. King, The Texas Company 3 750

Wells completed 12
Production 2253

ARCHER COUNTY
Rigs

Parkey, Empire Gas & Fuel Co. 2.
Reese, L. T. Burns 1.
Thomas-B, Marland Oil Co. 2.
Thomas, Pandem Oil Corp. 7.
Abercrombie, Roxana Petroleum Corp. 4.
Thomas, Texhoma Oil & Refining Co. et al 1

Wells Drilling

Turbeville-A, American Refining Co., et al. 1. 3.
T. B. Wilson, Bridwell & Heydrick 4.
Perkins et al, G. J. Brown 2.
Parkey, Empire Gas & Fuel Co. 2.
Parkey-A, Empire Gas & Fuel & Moran 1*.
P. P. Langford, Gulf Prod. Co. 1.
L. F. Wilson, Heartwell 1*.
Moss, Humble Oil & Refining Co. 1.
J. H. White, Jetter & Anderson 1*.
L. F. Wilson, Kentucky & Roxana Pet. Co. 1
W. F. Parrish, Magnolia Pet. Co. 11.
May Ruty-B, Magnolia Pet. Co. 6.
Turbeville, Marland Oil Co. 2, 3.
Perkins, Marland, Boss & Dillard 1.
W. L. Andrews, Mid-Kansas Oil & Gas Co. 2*
Dildav-Wilson, McCarty Oil Co. 3.
Duke-Parrish Bros. McCarty Oil Co. 2.
H. Ford, S. McGregor et al 3.
Mrs J. H. Carter, Park & Priddy et al 1.
J. L. Jackson, Shappell Oil Co. 1.
Turbeville-A, Simms Oil Co., 3, 5, 6.
Turbeville, Block 146, Simms Oil Co. & Consolidated 1.
Jentsch, The Texas Co. 1.
Turbeville-C, The Texas Co. 2, 3.
Turbeville, Tidal Oil Co. 1.
Moss, W. C. Young 1*.
Hamilton, Texhoma Oil & Refg. Co. 15.
Kemp & Kemper, Texhoma Oil & Refining Co. 1.
Kunkel, Cook & Reeder 3.
Thomas, Gates et al 7, 8.
Crawford, Golding & Cochran 1*.
Farmer, Golding & Cochran 1.
Spradlin, Grobin et al 1.
Harrison, Grisham et al 1.
Robinson, Hopper & Craves 2*.
Andrews, Jeffers & Newby 3.
Hudson, Magnolia Petroleum Co. 2.
Lowe, Magnolia Petroleum Co. 15, 24.
Portwood, Magnolia Petroleum Co. 13.
Richardson, Magnolia Petroleum Co. 1.
White, Marland & Kentucky 1.
Baggett, Mid-Tex Oil Co. 1*.
Holley, Murchison & Fain 1.
Wilson, Philmack Oil Co. 1.
Prideaux, Plains Production Co. 3*.
Kreager, Roxana Petroleum Co. 5.
Miller, Schermerhorn Oil Co. 1.
Robinson-A, Shaw & Rathke 3.
Turbeville, Simms Oil & Burns 2.
Brown, Sun Oil Co. 4.
Wolfe-A, Texhoma Oil & Refining Co. 3.
Rogers, Texhoma, Fisher & Cilliland 1.
Harmonson, Trammell & Moore 1*.
Prideaux, Lee Wilson 1.

BROWN COUNTY
Rigs

East Westerman, Cosden Oil Co. 2.
Keller, Hughes Development Co. 3.
Perry, Hurley Oil Co. 1.
Foster, Kone Production Co. 2, 3, 4.
Fry, Wm. Lester 1-A.
Brown, Christmas 1.
Lot 9, Evans 1.

Wells Drilling

Turner, Amerada Petroleum Corp. 1.
Dunn, Bedichek 1*.
McClanahan, Berryman et al 1.
Jones, Blockstone Oil Co. 1.
Weedon, Brown 1*.
Lowe, Choate & Henshaw 1.
Armstrong, Clark & Kimbell 1*.
Arledge, Cosden 1.
Williams, Cosden 4, 4-A 10-A.
Kilgore Bros., Curry & Moore 1.
Pickett, Curry & Moore 2.
Williams, Curry & Moore 1.
Wooldridge, Curry & Moore 3.
Graham Estate, Douglas et al 2.
Reynolds, Eastland Oil Co. 1.
Carmichael, Gibson Oil Co. 1*.
Teston, Gilman & McMurry 10.
Byler, Gray 1.
Gunn, Gunn Production Co. 9.
Prater, H-W Drilling Co. 8.
Keller, Holdeman 1.
Byrd, Huber Oil Co. 1-B.
Kilgore Bros., Huffman 2* 5.
Foster, Humble Oil & Refining Co. 4.
Fry, Humble Oil & Refining Co. 2.
Horrell, Hum le Oil & Refining Co. 1.
Hodnett, Humble Oil & Refining Co. 6.
E. P. & W. H. Kilgore, Humble Oil & Refining Co. 9-B, 12-B, 13-B, 14-B, 15-B, 6-C, 7-C, 8-C.
J. C. Kilgore, Humble Oil & Refining Co. 4-A, 7-B, 8-B, 9-B, 10-B, 11-B.
Wooldridge, Humble Oil & Refining Co. 1.
Hensley, Louisiana Oil & Refining Co.), 4.
Foster, McKenna, 4, 6.
Jones, Wooldridge, McLester Oil Co. 7, 8.
W. M. Wooldridge, McLester Oil Co. 7, 8, 9.
Gaines, McMann Oil & Gas Co. 1.
Fry, Magnolia Petroleum Co. 1.
Broom, Maxwell & Turman 1.
Eddington, Midwest Exploration Co. 2.
Suttles, Midwest Exploration Co. 9.
Keeler, Mitcham 1*.
Brannum, Moore et al 1*.
Newton, Pool et al 1.
Armstrong, Prairie Oil & Gas Co. 3.
Johnson, Prairie Oil & Gas Co. 1.
Johnson, Prairie Oil & Gas Co. 1.
Kilgore Bros., Prairie Oil & Gas Co. 1.
Pickett, Prairie Oil & Gas Co. 2.
Turner, Prairie Oil & Gas Co. 1*.
Jones, Ratliff et al 1.
Prater, Rhodes & Higher 11*.
Suttle, Root et al 13*.
Buzbee, Root & Rhodes 1.
Newton, T. B. Slick 2.
Brooks, Smith Oil Co. 1*.
Carson & Grantham, Smith Oil Co. 1.
Gaines, The Texas Co. 1.
Mullins, Smith Oil Co. 1.
Johnson, The Texas Co. 2.
Stout, The Texas Co. 1.
Lee, Thomas & Reynolds 1.
Shore, Wentz Oil Corp. 1.
Newton, West & H-Y Oil Co. 5, 10, 11, 12, 13.
Wooldridge, Will amson et al 2.
Whitted, Advance Oil Co. 1.
Bettis, Arkansas Fuel Co. 1*.
McDaniel, Campbell & Rosenfield 1*.
Pierce, Campbell & Rosenfield 1*.
Taylor, Fain et al 1*.
Taber, Holliday et al 1*.
Denman, Hynest et al 1*.
Fabs, Moore & Fuhrman 1.
Warnick, C. P. Morris 1*.
Sneed, Nelson 1.
Mattock, Savings & Scoggins 1*.
Cleveland, Schoonmacher 1*.
Hall, Shadbolt & Creighton 1.

CALLAHAN COUNTY
Rigs

Derrington, Canyon Oil & Gas Co. 6.
Boydston, Cibson & Johnson 1*.
Franke, Hughes Development Co. 1.
Seale Est., Mississippi Valley Oil Co. 1.
Ferguson, Sanger Oil Co. 1.
Dancy, Sinclair Oil & Gas Co. 1.
Bond, Slick 3.

Wells Drilling

Windham, Adams et al 1.
Long, Amerada Petroleum Corp. 4, 5.
Finley, Borealis Oil Co. 1.
Sawyer, Bradstreet 1.
Long, Brown & Co. 3.
Cutbirth, Canary et al 1.
Derrington, Canyon Oil & Gas Co. 5.
Ramsey & Estes, Cosden et al 1.
Henderson, Cranfill & Reynolds 3.
Johnson, Empire Gas & Fuel Co. 1.
Carey, Evans et al 1.
Miller, Flannigan et al 1.
Powell & Leggett, Hughes Dev. Co. 1.
Irvin, Humble Oil & Refg. Co. 1.
Derrington, McChesney 1.
Moore, Mission Drilling Co. 1*.
Walker & Caldwell, Moor et al 1.
Hays, Oklavania Oil Co. 1*.
Reed, Prairie Oil & Gas Co. 4, 5.
McDonough, Prairie Oil & Gas Co. 11.
Hall, Reeves & Meredith 1.
Young, Roeser & Pendleton 1.
Bond, Slick 2*.
Harris, Southern Petroleum Expl. Co. 1.
Alvord, White Eagle Oil & Refg. Co. 1*.

COLEMAN COUNTY
Rigs

Dibrell, Burke-Greis Oil Co. & Gwinnup 8*.
Morris, Magnolia Petroleum Co. 17.
Dibrell, Zwelfel et al 1.

Wells drilling

Dibrell, Altitude Oil 1.
Teagle, Gradstreet et al 1*.
Dibrell, Burke-Greis Oil Co. & Gwinnup 4.
Saiv & Smith, Curtis et al 1.
Crawford, English et al 1*.
Harris, English 1*.
Overall, Flannigan 1.
Dibrell Gilman et al 1.
Weatherred, Hum le Oil & Refg. Co. 1*
Smith, Jewell & Sill 1.
Dibrell, Mid-Kansas Oil & Gas Co. 1* 2*
Morris, Midwest Expl. Co 1.
Harris, National Oil & Refining Co. 2.
Harris, Ramsey & Maxey 1.
Morris, Ross & Wright 1.
Gray, Schermerhorn et al 1.
Munger, Texas & Pacific Coal & Oil Co. 1.
Gray, Urban 1.
Smith, Whitmire 1.
West, Wilford et al 1.
Pfluger, Jewell & Sill 1.
Harris, Kirby Pet. Co. 1.
Russell, Logan et al 1.

XUM

Pitty, McKenzie et al 1*.
Harris, Monroe Production 1.
Overall, Monroe Production Co. 2*
Burke, Morrison & St. John 1*.
Johnson, Newby et al 1*.
Garrett, Shadbolt & Creighton 1.
Taylor, Westheimer & Daube 1*.
Witkowski, Wood Oil Co. 1.

Eastland County

Rigs

Norris, Corzelius Bros. 1.
Horbin, Lewis & Moore 1
Pritchard, Moore et al 1.
Dill, Humble Oil & Refg. Co. 1
Scott, Mathews & Terrell 1.
Lewis, Texas Development Co. 2.

Wells Drilling

Allison, Corzelius Bros. 1.
Wright, Eastland Oil Co. 3.
Higgins, Evans et al 1.
Hankins, Gates Oil Co. 5.
Richmond, Greene Production Co. 1.
Parsons, Humble Oil & Refg. Co. 4*, 6*.
Ford, Magnolia Petroleum Co. B-1.
Harris, Magnolia Petroleum Co. 12.
Thurman, Magnolia Petroleum Co. 1.
Farmer State Bank, Mid-Kansas 1.
Casey, Mook- Texas 2.
Wright, Panhandle Refg. Co. 2.
Motes, Parsons et al 5.
Robinson, Parsons et al 1.
Fox, Parton & Meyers 1.
Scott, Teatsworth et al 10.
Wright, The Texas Co. 1.
Butler, T. & P. Coal & Oil Co. 27*.
Durocher, T. & P. Coal & Oil Co. 1.
Grove, Adams et al 2.
Rose, Arnold et al 1.
Hill, Barkley & Crotty 1*.
Noble, Chestnut & Smith 1*.
Ramsower, Continental Oil & Gas Co. 1*.
Kemp, Corzelius Bros. 1.
Proctor et al, Eastland Oil Co. 1.
Owens et al, Hickok Production & Dev. Co. 1
Fee, Lewis et al 1.
Johnson, McBride 1*.
Nunnally, Murchison & Fain 1.
Clark, Navarro Oil Co. 1*.
Falls, Ross & Frost 1*.
White, Rumbaugh & Thompson 1*.
Allen, Shasta Oil Co. 1*.
McAllister, Thomas & Reynolds 1.
Cove, World Oil Corp. 1.
F. W. Allen, Gulf Production Co. 1.
J. W. Horn-A, Gulf Prod. Co. 1.
J. D. Parsons, Gulf Prod. Co. 7.

MONTAGUE COUNTY

Rigs

Yarborough Est., Alexander Lyles, Inc. 1.
Snapp Est., Camp Oil & Gas Co. 1.
Maddox, Humble Oil & Refg. Co. 6.
Maddox, Olean Petroleum Co. 5.
Rowland, Texhoma Oil & Refining Co. 7.
Howard, Price & Battle, A. C. Walker et al 1.
Steadman, Universal Oil Co. 1.

Wells Drilling

Howard et al, Arco Oil Co. 2.
Comyers, Commercial Petroleum Co. 1*.
Maddox, Empire Gas & Fuel Co. 1.
Maddox, Farlan Oil Co. 2.
Flint et al, Farmers Creek Oil & Gas Co. 1*.
Madden, F. H. E. Oil Co. et al 1.
Howard et al, F. H. E. O'l Co. et al 3.
N. J. Howard et al, Gulf Prod. Co. 1.
N. J. Howard et al-A, Gulf Prod. Co 1
J. W. Roland, Gulf Prod. Co. 1.
Maddox, Gracey-Kahle et al 2.
R. Hinds, Humble Oil & Refg. Co. 12.
Maddox, Humble Oil & Refg. Co. 4.
Howard et al, McMan Oil & Gas Co. 1
Maddox, Olean Petroleum Co. 4.
Kerk, Pure Oil Co. 1.
Jones B-1, Pure Oil Co. 1.
Oldham-A, Pure Oil Co. 3.
Maddox, E. L. Smith Oil Co. 2, 4.
Gist-A, The Texas Co. 16, 18, 20, 21, 23.
Oldham, The Texas Co. 14, 15, 16, 17.
Madden-A, The Texas Co. 2.
Madden-C, The Texas Co. 1, 2*.
J. E. Martin, The Texas Co. 3.
Howard et al, Texhoma Oil & Refg. Co. 10, 11.
Howard et al-A, Texhoma Oil & Refg. Co. 9
Maddox-A, Texhoma Oil & Refg. Co. 1.
Bouldin-A, Texhoma Oil & Refg. Co. 1, 2.
Rowland, Texhoma Oil & Refg. Co. 5, 6.
Boedecker, Grigsly Oil Co. 1*.

SHACKELFORD COUNTY

Rigs

Davis, Hope Petroleum Co. 3.
Goodwin, Mid-Kansas Oil & Gas Co. 1.
Cook, Roeser & Pendleton 21-A-84, 3-B-60.
Scott, Roeser & Pendleton 1-171.
King, Simmons 1.
Nail, Sinclair Oil & Gas Co. 8.

Wells Drilling

Moberly, Albany Oil Co. 9 (formerly Moberly, W. L. Knight 1).
Davis, American Petroleum Co. 1.
Nail, Carter Development Co. 2, 3.
Proctor, Carter Development Co. 3.
English, Carter et al 1.
Ivey, Cranfill & Reynolds 1.
Mo'erly, Derby Oil Co. 1.
Dillas Bros., Dingee et al 1.
Newell, Franch & Lewis 2*.
Erharat, Gallagher & Howland 1*.
Dyer, Gibson & Johnson 1.
Newell, Gibson & Johnson 1.
Owens, Gilliam & Logan 1*.
Nail, Googan 1.
J. S. Willis et al-A, Gulf Prod. Co. 1.
Chatman, Gwinnup et al 1.
Poindexter, Gwinnup et al 1-47.
Reynolds, Haile & Knight Oil Corp. 1
Williams, Hazelton et al 1*.
Matthews, Hodges & Eagle 1.
Poindexter, Hope Petroleum Co. 1.
Reynolds, Hope Petroleum Co. 8, 9, 10, 11.
Diller Bros., Hughes et al 1*.
Cook, Humble Oil & Refining Co. 8, 10, 11, 12.
Flippen, Jackson et al 2*, 1-B*.
Snygg, Logan et al 1.
Moberly, Magnolia Pet. Co. 2.
Terry, Magnolia Pet. Co. 6.
Matthews, Marland Oil Co. 1.
Cannon, Melton Oil Co. 1*.
Newell, Merry Bros. & Perini 2.
Moore, Milham Corp. of Texas 1.
Sedwick, Milham Corp. of Texas 2.
Simpson, Milham Corp. of Texas 2.
Nail, Moore 1.
Flippen, Panhandle Refg. Co. 1.
Jeter, Reclamation Oil 1*.
Matthews, Republic Production Co. 1.
Matthews, Robert Oil Corp. 1.
Cook, Roeser & Pendleton, 15-A-84, 18-A-84, 20-A-84, 22-A-84, 23-A-84, 24-A-84, 24-A-84, 14-A-845, 16-A-85, 2-B-60, 1-B-60, 2-B-61, 9-B-84, 12-B-85, 14-B-85, 14-B-85, 15-B-85.
Nail, Roeser & Pendleton, 1-A-121.
Nail, Sinclair Oil & Gas Co. 7.
Matthews, Skelly Oil Co. 1.
Poindexter, Spoonts et al 1.
Poindexter, Waterburg et al 1*.
Proctor, Wentz Oil Corp. 2.
Matthews, York & Delaney 1
Austin, Zeigler & Fenteiss 1.

STEPHENS COUNTY

Rigs

Magers, Hart Oil Corp. 1.
Morrison, Mid-Tex Oil Co. 2*.
Hodges, Chestnut & Smith Corp. 2.
Gardenshire, Acct. 2, T. P. Coal & Oil Co. 5.

Wells Drilling

Wm. Spicer, Gulf Production Co. 2.
Hamil, Humble Oil & Refining Co. 1.
Richardson, Humble Oil & Refining Co. 1.
Coody, Kenridge Oil Co. 1.
J. W. Hill, Mid-Kansas 19.
S. H. Hill, Acct. 1, Mid-Kansas 10.
S. H. Hill, Acct. 2, Mid-Kansas 1.
Richardson, Mid-Kansas Oil & Gas Co. 2.
Vick, Mid-Tex Oil Co. 1*.
Martin, Pennok Oil Co. 8*.
Moon, Phillips Petroleum Co. 1.
Lydon, Prairie Oil & Gas Co. 5.
Knox, Republic Production Co. 7*.
Martin, Texas Consolidated Oil Co. 8.
Vick, Atkinson & Sandefer 1*.
Williams, Atkinson & Sandefer 2*.
Compton, Bateman & Campbell 1*.
Satterfield, heirs, Chastain & Donely 1.
Goforth, Corzelius Bros. et al 1*.
Long, Hucony Gas Co. 1*.
McPherson, Hucony Gas C. 1.
Swenson, Jones 32*.
Hart, Humble Oil & Refg. Co. 6.
Christenson, Livingston et al 1.
Chesley, Meredith & Thomas 1.
Elder, Pender Production Co. 2*.
Hart, Pender Production Co. 2*.
Akin, Phillips Petroleum Co. 4.
Sikes, States Oil Corp. 4.
Carey, Sun Oil Co. 6.
Swenson, Swensondale Oil Corp. 1-B*.
Taylor, Swensondale Oil Corp. 1*.
Webb, Urban et al 1.

THROCKMORTON COUNTY

Rigs

Ellis, Humble Oil & Refg. Co. 1.
Stubblefield, Humble Oil & Refg. Co. 3.

Wells Drilling

J. H. Lee, Gulf Production Co. 1.
J. M. Parrott, Gulf Production Co. 1.
Batcheler, Humble Oil & Refg. Co. 1
Harris, Humble Oil & Refg. Co. 1.
Overcost, Humble Oil & Refg. Co. 1*.
Stubblefield, Humble Oil & Refg. Co. 2.
Elliott, Red Bank 1, 2.
Parrott, Red Bank 2, 3, 5.
Elliott, Reiter-Foster 1, 2.
Parrot, Reiter-Foster, 1, 2, 3.
Stubblefield, Reiter-Foster 2.
Ellis, Texas Pacific Coal & Oil Co. 1.
McKeichan, Adams et al 1*.
Kelly, Associated Petroleum Co. 3*.
Matthews, Hoffer Oil Co. 1.

WICHITA COUNTY

Rigs

Cook, Magnolia Petroleum Co. 12.

Wells Drilling

Willis, Dr. C. E. Bailey et al 1*, 2*.
J. F. Keil, Keil et al 1*.
Miller, H. M. Long et al 1*.
L. W. Proctor, Proctor Oil Co. 1.
H. Beach, Texhoma Oil & Refg. & Magnolia Pet. Co. 1-A.
Dutton, Simms Oil Co. 6.
Chilson, Block 12, Stump & Co. 3.
Burnett, Ascott Oil Co. 7.
Ward & Todd, Bridwell & Heydrick 6, 7.
Jennings, Central Holding Co. 4.
Ward & Todd, Clark and others, 4.
Ward & Todd, Clark & Hammond et al 2.
Hirschi, Compton Oil Co. 2.
Waggoner, Culberson Co. 13.
Jennings, Dale Oil Corp. 26.
Pierce, Empire Gas & Fuel Co.
R. J. Miller, Gulf Production Co. 63.
Ward & Todd, Hammond 1.
Allingham A, Hereford Oil Co. 3.
Mitchell, Jaffee et al 4.
Jenalngs, Jones Oil Co. 5*.
Munger, K. M. A. Oil Co. 26.
Fassett & Tuttle, Kummell & Dillard 1.
Fassett & Tuttle, Magnolia Petroleum Co. 1.
Pratt-A, Magnolia Petroleum Co. 18.
Ramming-A, Magnolia Petroleum Co. 22.
R. Ramming, Magnolia Petroleum Co. 2.
Allen & Kemp-C, O'Donohoe & Gates 1.
Harrison, O'Neil 1.
Griffin, Panhandle Refg. Co. 1.
Douglas Block 2, Patterson 1.
Fisher, Petroleum Investment Co. 19, 21.
Allen & Kemp-D, Petroleum Prod. Co. 5.
Henson, Ryan Petroleum Co. 4.
Nance, Ryan Petroleum Co. 78.
Ramming, Skelly Oil Co. 12.
Waggoner Bros., Stump & Co. 2*.
Waggoner, The Texas Co., 307, 309.
Burnett-E, Texhoma Oil & Refg. Co. 10.
Waggoner Bros., Texhoma Oil & Refg. Co. 15.
Burnett, Virginia Oil Association 26.

WILBARGER COUNTY

Rigs

W. T. Waggoner-R, Gulf Production Co. 6.
Waggoner-M, Humble Oil & Refining Co. 14, 16.
Sumner, Magnolia Petroleum Co. 55.
Waggoner-A, Phillips Petroleum Co. 14.
Waggoner-H, Phillips Petroleum Co. 8.
Waggoner-N, Phillips Petroleum Co. 1, 2.
Waggoner-Q, Phillips Petroleum Co. 7.
Waggoner-T, Phillips Petroleum Co. 6.
Waggoner-Y, Phillips Petroleum Co. 2, 4.
Waggoner-QQ, Phillips Petroleum Co. 12.
Guyer, Stewart et al 1.

Wells Drilling

Allison, Allford Oil Co. 1*.
Stephens-A, Barkley & Meadows 13*, 14*.
Stephens, Bridwell & Heydrick 14*.
Stephens, Empire Gas & Fuel Co. 46*, 48, 49, 50.
Bond-B, Humble Oil & Refining Co. 14.
Castlebury, Humble Oil & Refg. Co. 24.
Chauncey & Gambrill, Humble Oil & Refg. Co. 1.
Stephens, Humble Oil & Refg. Co. 50.
Waggoner-H, Humble Oil & Refg. Co. 10* 12*, 15*.
Waggoner-I, Humble Oil & Refg. Co. 6.
Waggoner-K, Humble Oil & Refg. Co. 9.
Waggoner-L, Humble Oil & Refg. Co. 2.
Waggoner-M, Humble Oil & Refg. Co. 7, 11, 13, 15.
Waggoner-N, Humble Oil & Refg. Co. 5.
Waggoner-O, Humble Oil & Refg. Co. 12.
Waggoner-P, Humble Oil & Refg. Co. 2.
Waggoner, Kelly et al 1*.
Fee, Magnolia Petroleum Co. 74.
Piper, Magnolia Petroleum Co. 51.
Maggie Waggoner, Magnolia Petroleum Co. 1.
Waggoner-A, Milham Corp. 1.
Waggoner-B, Milham Corp. 5.
Waggoner-H, Milham Corp. 1*, 6, 12.
Waggoner-L, Milham Corp. 4, 15.
Waggoner, Miller Oil Co. 4.
Waggoner-E, Murchison & Fain 1.
Fluhman, Murchison & Fain 1.
Waggoner-C, Phillips Petroleum Co. 1.
Waggoner-D, Phillips Petroleum Co. 7*.
Waggoner-F, Phillips Petroleum Co. 10.
Waggoner-H, Phillips Petroleum Co. 6*, 7.
Waggoner-L, Phillips Petroleum Co. 3, 4, 5.
Waggoner-M, Phillips Petroleum Co. 2.
Waggoner-Q, Phillips Petroleum Co. 4.
Waggoner-R, Phillips Petroleum Co. 2*.
Waggoner-Y, Phillips Petroleum Co. 1*.
Waggoner-Z, Phillips Petroleum Co. 1.
Waggoner-FF, Phillips Petroleum Co. 1.
Waggoner-HH, Phillips Petroleum Co. 2.
Waggoner-JJ, Phillips Petroleum Co. 2.
Waggoner-NN, Phillips Petroleum Co. 7, 8, 9*, 10.
Waggoner-QQ, Phillips Petroleum Co. 11.
Waggoner-AAA, Phillips Petroleum Co. 1*.
Waggoner-A, Prairie Oil & Gas Co. 4*, 5.
Waggoner-B, Prairie Oil & Gas Co. 1*, 3.
Kemp, Quincy Oil Co. 2*.
Section 19, Rio Bravo Oil Co. 1.
Waggoner-C, Rondeau 1.
Coleman, Roxana Petroleum Corp. 1.
Waggoner, Sloan 2.
Zipperle, Stockton & Maxwell 1.
Waggoner, The Texas Co. 305, 306.
Waggoner-D, Waggoner Refining Co. 1.
Smith, Wanderer Oil Co. 1.
Zipperle, Weir 1*.
Milner, Whitehead 1.
Waggoner, Whitehead 1*.
Woodward, Wichtex Oil Co. 1.
Haney, Wood 1.

YOUNG COUNTY

Rigs

Benson, Madden et al 5.
Routon, Simms Oil Co. 2.
Routon, Texhoma Oil & Refg. Co. 1.
Stewart, The Texas Co. 2.
McCluckey, Roeser & Pendleton 1.

Wells Drilling

Johnson, Barclay & Harris 1*.
Steen, Casey et al 1*.
Fee, J. W. Collier, 1.
Logan, Evans et al 2*.
Ferguson, Jeffers & Jeffers 1*.
Williams, Minnick et al 1.
Stewart, J. J. Moran, 2, 4.
Whitehead, Pandem Oil Co. 6.
Hankins, Peeler et al 1.
Jack, Reed et al 5.
Jack, Reed et al 5.
Spencer, Roberts Oil Co. 1.
Stewart, Roberts Oil Co. 1.
Stewart, Ruff et al 2.
Benson, Tidal Oil Co. et al 2.
Benson-A, Tidal Oil Co. et al 8, 9, 16.
Manley, Wentz Oil Co. 1.
Morrison Oil Co., Coones & Hatchkiss 1*.
Logan et al, Halmack Oil Co. 1.
Griffin, Humphries Oil Corp. 1.
Donnell, Liner Drilling Co. 1*.
Donnell, McQuain et al 1*.
Booger, Nance & Dycus 1.
Moore, Transcontinental Oil Co. 1.

MISCELLANEOUS

Clay County—

Scaling, Hamilton, Barkley & Meadows 1.
Inman, Howard Petroleum Co. et al 2-A*.
Sealing, Atlantic City Petroleum Co. 1*.
Scaling, Faublon, Mills & McGann 1.
Dowlen & Son, W. P. Ferguson et al 1.
Conner, W. F. Grisham et al 1.
Waggoner, Lone Star Gas Co. 28*, 29.
Wright, Wren Oil Corp. et al 1.

Cochran County—

Rigs

Landon, J. C. Whicker 1.

Collin County—

Rigs

Watkins, Verona Production Co. 1.

Comanche County—

Rigs

Perry, Bundt et al 1.
Gardenshire, Melton Oil Co. 1.
Chapman, Sudderath et al 1*.

Wells Drilling

Evans, Brown Drilling Co. 1*.
Cogburn, Carter et al 1.
Campbell, Dublin Development Corp. 1*.
Mauncey, Kirk & Brewer 1.
Braswell, Moore 1.
Turner, Smith 1*.
Kirk, Texas Pacific Coal & Oil Co. 1.

Cooke County—

Rigs

A. Hyman, C. C. Lanier 2, 3.
Cook, McElreath & Saggett 1.

Wells Drilling

Lester, Big Indian Oil & Dev. Co. 1.
Mitchell, Cochran et al 1.
Dennis, Hooser Oil Co. 2.
Kidd, Hudson Petroleum Co. et al 1*.
A. Hyman, C. C. Lanier 1.
A. Hyman, C. C. Lanier et al 5.
Hamilton, Leonard & James 1*.
Houston, Simpson et al 1.
Kitchens, Vacuum & Big Indian 1.

Cottle County—

Wells Drilling

A. C. Dulaney, J. T. Woodley 2*.

Denton County—

Wells Drilling

Fortenberry, Gainsville Synd 1.

Erath County—

Wells Drilling

Barton, Gillett 1*.
Finch, Nelton Oil Synd. 3*.
Smith, Welsh et al 1*.

Feard County—

Wells Drilling

Burress, Central Oil Interests 1.
A. T. Miller, Gulf Prod. Co. 1.
Easley, Humble Oil & Refg. & Navarro Oil Co. 1.
Muesse, Wood 1*.

Fannin County—

Rigs

Moors, Ervin Oil Co. 1.

Hardeman County—

Wells Drilling

Wheat, Benedum & Trees 1*.
Norton, Walf et al 1*.

Haskell County—

Wells Drilling

Bunkley, Bridwell & Mayfield 1.
Colbert, Weart & York 1*.

Hood County—

Wells Drilling

Cook, Parsons et al 1.

Jack County—

Wells Drilling

Loving, Burke-Greis Oil Co. 1*.
Cullers, Buttram Pet. Co. 1, 2.
Gaskin, Buttram Petroleum Co. 1.
Preston, Buttram Petroleum Co. 4, 5.
Rounsaville, Camp Oil & Gas Co. 1.
Bailey, Conkin et al 1.
Thomason, Dingee et al 1*.
Snedeker, Hester, Hawkins & Staley 3*.
Richards & Lanier, McClure et al 1*.
Gray, Rochelle et al 1.
Cullers, Seaboard Oil Co. 2.
First National Bank, Security Drilling Co. 1
Carpenter Est., Watchorn Oil & Gas Co. 1.

Jones County—

Wells Drilling

Bristow, Shaw & Rathke et al 1*.
Powell, J. C. Yancey et al 1*.
Herndon, J. C. Yancey et al 1*.
J. Winter, Phillips Petroleum Co. 1.
S. R. Cox, Marland Oil Co. 1.

Knox County—

Wells Drilling

Yellow House, E. C. Marrs et al 1*.

Mills County—

Wells Drilling

Weston, Gregory Bros. 1*.

McCulloch County—

Wells Drilling

Rice, Gibson Oil Co. 1.

Palo Pinto County—

Rigs

Hart, Dixie Drilling Co. 1.
Fee, Texas Pacific Coal & Oil Co. 26.

Wells Drilling

Dalton, Dalton Oil Co. 6.
Dalton, Dalton et al 1.
Scudder, Denver, Drilling Co. 1*.
Owens, Nelson Oil Synd. 1*.
Strawn Coal Co., Burton-McKee Oil Corp. 1-A.
Guest, Chestnut & Smith Corp. 1*. (formerly Goodwin & White).
Edgin, Dalton 1*.
Cardwell, Hart Oil Corp. 1.
Grime, Hart Oil Corp. 1*.
Stuart, Moon & Sneboid 4.
Satterfield heirs, Meyers & Williams 1.
Rasmussen, Pender Production Co. 2*.

Parker County—

Wells Drilling

Stickford, Coffin et al 1*.
Davis, Monroe 1*.

Wise County—

Wells Drilling

White, Cosden and Consol. 1.
Houston, R. W. Little 1*.
Cassidy South Western Commercil Co. Magnolia Petroleum Co. 2*.
Castleberry, Transcontinental Oil Co. 1.

WEST TEXAS
CRANE COUNTY

Rigs

Cowden Bros., Duffy Bros. and others 1.
E. S. Hughes, Independent Oil & Gas Co. 1.
E. S. Hughes, Marland Oil Co. 1-E.

Wells Drilling

P. J. Lea, Cranfill Bros. Oil Co. 1*.
State-Lasseter, Gulf Prod. Co. 1.
Crier-McIlroy, Gulf Prod. Co. 1, 2, 3.
J. T. McIlroy, Gulf Prod. Co. 2, 3.
University Church, Magnolia Petroleum Co. et al 2.
O'Keefe (University) Magnolia Petroleum Co. 1*.
Hughes-Gibbs, Marland Oil Co. 1.
E. S. Hughes, Marland Oil Co. 2-C, 1-D.
Keith-Hughes, F. P. Zoch and Marland Oil Co. 2.
Union Land Co., The Texas Co. 1-F*.
H. M. King, The Texas Co. 2.
University, Tidal Oil Co. 1.
Cowden, Texas Development Co. 1*.

CROCKETT COUNTY

Rigs

L. P. Powell-D, Gulf Prod. Co. 1.
Powell, J. K. Hughes 2-B.
L. P. Powell, Republic Production Co. 1.
Shannon, J. D. Young and Carl Cromwell 1.

Wells Drilling

University, California Co. 2*.
Noelke, J. S. Cosden and others 1*.
Couch, Cumberland Oil & Gas Co. 1.
L. P. Powell-A, Gulf Production Co. 4, 5
L. P. Powell, Humble Oil & Refg. Co. 8, 9, 10.
L. P. Powell, J. K. Hughes 2-A 3-A.
University, Wm. Shaffer and others 1.
Shannon, Ben Simon and others 1.
Massie, J. D. Young and Carl Cromwells 1.
University, F. P. Zoch and Marland Oil 1*.
University, H. F. Wilcox Oil & Gas Co. 1.

MITCHELL COUNTY

Rigs

Mary Foster, Magnolia Petroleum Co. 2.
Francis Adams, Magnolia Petroleum Co. 2.

Wells Drilling

F. E. McKenzie, B. H. Cogdell 1*.
C. P. Conway, Owens & Sloan 1.
C. M. Adams, Magnolia Petroleum Co. 6.
Hyman, Morrison & Thompson 1.
Ellwood, Mid-Kansas Oil & Gas Co. 2.
Hardee, Teas & Stivers 1.
Morrison, Lease 2, California Co. 16.
J. J. Handley, California Co. 1.
Pettifils, Lease 1, California Co. 2.
C. M. Adams, Lease 3, California Co. 2.
J. J. Ford, F. P. Zoch et al 1.
W. R. Womack, Atlantic Oil Prod. Co. 6, 7.
G. W. Womack, Magnolia Petroleum Co. 1.

REAGAN COUNTY

Rigs

University, Group 1, Texon Oil & Land Co. 55, 56, 57, 58, 59, 60, 61.
University, Group 2, Texon Oil & Land Co. 5

Wells Drilling

University, Big Lake Oil Co. 57, 72, 73, 76, 77, 78, 79, 80, 81, 82, 83, 85, 86, 87, 88, 89, 90, 91, 92, 94, 95, 96, 105 8-B*.
University, Camp et al 1*.
Sawyer Cattle Co., Marland Oil Co. (Pickrell) 1.
Walters, Simon et al 1*.
University, Group 1, Texon Oil & Land Co. 39, 40, 47, 48, 49, 50, 51, 52, 53, 54, 1-A, 5-A.

UPTON COUNTY
Rigs
Burleson, Dixie Oil Co. 8.
Hughes, Dixie Oil Co. 5, 6, 7.
Lea Taylor, Independent Oil & Gas Co. 3*. 5.
Emma Wooley, Independent Oil & Gas Co. 3, 4.
Shirk, Johnson & McCamey 1.
Burleson, Marland Oil Co. 22, 23, 24, 25.
Sanger, Marland Oil Co. 13.
Gibbs, Marland Oil Co. 1.
Halff, Marland Oil Co. & Texon Oil & Land Co. 1.
Wells Drilling
Burleson, Dixie Oil Co. 7.
Hughes, Dixie Oil Co. 3, 4.
Crier-McIlroy, Dunning and others 1.
M. L. Baker, Gulf Prod. Co. 2.
M. L. Baker-B, Gulf Prod. Co. 1.
J. H. Shirk-D, Gulf Prod. Co. 1.
Sanger, Gulf Production Co. 1.
A. S. Burleson, Humble Oil & Refg. Co. 1, 2.
T. J. McElroy, Humble Oil & Refg. Co. 1.
Ricker & Dodson, Humble Oil & Refining Co. 1.
Lea Taylor, Independent Oil & Gas Co. 4, 6, 7, 8.
Emma Wooley, Independent Oil & Gas 2.
Burleson, Independent Oil & Gas 2, 3.
Rankin, Kirkwood et al 1.
Mrs. M. L. Baker, McMan Oil & Gas Co. 1.
A. S. Burleson, Marland Oil Co. 9, 2-A, 3-A.
Burleson, Marland Oil Co., 12, 13, 14, 15, 16, 17, 18, 19, 20.
Baker, Republic Production Co. and Marland Oil Co. 4.
Sanger, Marland Oil Co. 9, 10, 11, 12.
Della Bowen, Roxana Petroleum Corp. 1, 2, 3.
E. S. Hughes, Roxana Petroleum Corp. 1.
Bull, Sartain Bros. & Davis 1.
O. P. Jones, Skelly Oil Co. 1.
Burleson, Sun Oil Co. 3, 4, 6.
Shirk, Texas Pacific Coal & Oil Co. 1, 2.
R. King, The Texas Co. 1, 3, 4, 5*.
Burleson, The Texas Co. 1, 2.

MISCELLANEOUS WEST TEXAS
Brewster County—
Wells Drilling
J. P. Wilson, Green Valley Oil Co. 2*.
Skinner, John Rosenborough & Skinner 1*.
Coke County—
Wells Drilling
E. C. Rawlings, Lipan Oil Co. 1*.
Concho County—
Wells Drilling
Hartgrove, The Exploration Co. 1.
Schultz, Kemper Kimberlin and others 1*.
W. S. See, Culbertson Bros. 1.
Hartgrove, Gene Mays and others' No. 1.
Culberson County—
Rigs
C. L. Cass, Big Lake Oil Co. and others 1.
Radford, James H. Gardner and others 1.
Wells Drilling
Kloh & Rumsey, Deep Rock Oil Co. 1.
Ector County—
Wells Drilling
Johnson, J. S. Cosden, Henry Zweifel and others 1*.
G. W. Connell, J. S. Cosden and others 1-A.
W. E. Connell, J. S. Cosden and others 1-B.
Kloh & Rumsey, The Exploration Co. 1.
E. P. Cowden, Llano Oil Co and others 1
W. P. Edwards, Simms Oil Co. 1.
J. W. Buchanan, F. E. Skinner & Eastland Oil Co. 1.
Fisher County—
Wells Drilling
W. F. Martin, Ideal Oil Co. 1.
Gaines County—
Wells Drilling
Lindsey, Hucony Oil Co. 1.
Garza County—
Wells Drilling
S. M. Swenson, Deep Rock Oil Co. 1.
Connell, Emerald Oil Co. 1-A.*
J. M. Boren, Emerald Oil Co. 1*.
Glasscock County—
Rigs
L. S. Bell, Plateau Oil Co. 1.
Wells Drilling
Nellie Calder, Marland Oil Co. 1.
Howard County—
Rigs
Otis Chalk, Marland Oil Co. 3.
Mary Chalk, Magnolia Petroleum Co. 1.
Otis Chalk, Owen & Sloan 3.
Wells Drilling
Scott, Lockhart & Co. 1.
Dora Roberts, Lockhart & Carey 1
Chalk, Marland Oil Co. 2.
Clay, Reeves & Apperman 1.*
Roberts, Joe Edgar et al 1.
Otis Chalk, Lockhart & Co 1-A
Jeff Davis County—
Wells Drilling
T. M. Wingo, Herbert Oil Co. 1.*
W. W. McCutcheon, Humble Oil & Refining Co. 1.
J. Z. Means, J. K. Hughes Development Co. 1.
Jones County—
Wells Drilling
Barron, The Texas Co. 1.*
Kimble County—
Rig
Harrison, Dixie Oil Co. 1.
Loving County—
Wells Drilling
E. L. Allen, Lockhart & Co. 1.
Lynn County—
Wells Drilling
C. O. Edwards, The Hart Oil Corp. 1.
Menard County—
Rigs
White, J. R. Lewis and others 1.
Midland County—
Wells Drilling
Jones, M. Agress and others 1.*
Hill, Rook & Zimmerman 1.*
Nolan County—
Wells Drilling
Arthur Sears, Hucony Gas Co. 1.
Pecos County—
Rigs
J. C. Trees, Benedum & Trees 1.
W. W. Ratchler, Bull and others 1.
Scharff-Blackman, Cromwell & Kimberlin 1.
Wells Drilling
Hershenson, Dixie Oil Co. 1.*
Perry, Transcontinental Oil Co. 1.
Townsite, Quinby Oil Co. 1.*
Macy, West Texas Exploration Co. 1.*
Presidio County—
Wells Drilling
Tootle Estate, Hadlock & Miller 1.
Reeves County
Wells Drilling
Abram, Schooler, Slack and others 1.*
State Land, Gresham & Hunter 1.
Runnels County—
Rig
Fowler, Red Bank Oil Co. 1.
Schleicher County—
Wells Drilling
J. A. & W. T. Whitten, Beavers & Leath and others 1.*
Sol Meyer, Cope & Dalton 1.*
Scurry County—
Wells Drilling
J. O. Quinn, Camp Springs Oil & Gas Co. 1.
H. P. Welborn, Northwest Co. 1-A.
Stonewall County—
Wells Drilling
Craft, Arkansas Fuel Co. 1.*
Ward, Elder Nance 1.*
Thomas, Elder Nance 1*.
Ward, Ward Synd. 1.*
Sterling County—
Wells Drilling
E. W. Douthett, Co-Operative Lease & Development Co. 1-A.*
C. A. Broome, The Exploration Co. 1.
L. T. Clark, H. D. Rummel and others 2.*
Sutton County—
Wells Drilling
Clarkson-Allison, Chesapeake Oil Co. 1*.
Taylor County—
Rigs
Anderson, Sanger Oil & Refining Co. 2.
J. F. Gillespie, Sanger Oil & Refining Co 1.
Fee, City of Abilene 1.
Wells Drilling
Cox, Sanger Oil & Refining Co. 1.*
Anderson, Sanger Oil & Refining Co. 1.
Terrell County—
Rig
Scott, Sun Oil Co. 1.
Wells Drilling
Sowden, E. T. Williams and others 1.
Tom Green County—
Wells Drilling
Llano County School Land, M. D. Bryant and others 1.
Pulliam, World Oil Co. 1.
Val Verde County—
Wells Drilling
Moore Estate, A. Blume and others 1.* Co. 1.*
Russell & Weathersbee, East Del Rio Oil
B. S. Harrison, Plateau Oil Co. 1.
Whitehead, Independent Operators 1*.
Winkler County—
Rig
Cowden Cattle Co., R. S. Matthews and others 1.
Wells Drilling
Kloh & Rumsey, Brandon & McCamey and others 1.
Sealy, Leigh Talliaferro 1.
J. W. Amburgey, Ben Simon, Ladd and others 1.
T. G. Hendricks, R. A. Westbrook and others 1.
John Sealy, F. P. Zoch and others 1.
Yoakum County—
Wells Drilling
Hurdle, Covey & Klinke and others 1.*
Hinkle, Russell & Trunick 1.*

TEXAS PANHANDLE

Summary of Wells Completed

County—	Comp.	Prod.	Dry	Gas
Carson	7	5,630	2	0
Hutchinson	98	62,285	0	0
Wheeler	2	6	0	2
Total August	107	67,915	2	2
Total July	61	35,695	1	4
Difference	46	32,220	1	2

Summary of Rigs and Wells Drilling

County—	Rigs	Dlg.	S.D.	Tl
Carson	1	24	7	38
Gray	21	59	6	86
Hutchinson	75	279	30	384
Wheeler	8	6	6	20
Miscellaneous	11	24	13	48
Total August	122	392	62	576
Total July	105	407	33	545
Difference	17	15	29	31

CARSON COUNTY
G. W. Whittier, Gibson Oil Corp. T.A
S. B. Burnett, Gulf Prod. Co. 14 390
Burnett Estate, Magnolia Pet. Co. 2 dry
Burnett Estate Marland Oil Co. 6 40
Burnett Estate, Marland Oil Co. 3-A 3100
Burnett Estate, Marland Oil Co. 4-A 2000
Burnett Estate, Marland Oil Co. 1-C 100
Wells completed 7
Production 5630
Dry 2

HUTCHINSON COUNTY
Whittenburg, Amerada Pet. Corp. 2 40
Whittenburg, Amerada Pet. Corp. 3 30
Whittenburg-B, Amerada Pet. Corp. 1 60
Smith, Apex Oil Co. 2 460
Whittenburg, Canyon Oil & Gas Co. 1 300
J. E. Pritchard, Center Dome Oil Co. 1. 75
Whittenburg, Coble Oil Co. and Whittenburg 3 100
Johnson, Devonian Oil Co. 2 2000
Johnson, Devonian Oil Co. 3 400
Smith, Dixon Creek Oil Co. 16 3500
Smith, Dixon Creek Oil Co. 16 50
Smith, Dixon Creek Oil Co. 34 657
Johnson-A, Empire Gas & Fuel Co. 1 250
Johnson-B, Empire Gas & Fuel Co. 1 1063
J. F. Weatherly, Empire Gas & Fuel Co. 1 900
J. T. Hodges, Golding & Phillips 1 40
W. S. Christian, Gulf Prod. Co. 1 147
W. S. Christian et al, Gulf Prod. Co. 1 185
Dial et al, Gulf Prod. Co. 12 282
Dial et al, Gulf Prod. Co. 13 250
E. B. Johnson et al, Gulf Prod. Co. 1 342
E. B. Johnson et al, Gulf Prod. Co. 2 312
Whittenburg-A, Gulf Prod. Co. 2 652
Whittenburg-A, Gulf Prod. Co. 3 1032
Whittenburg-A, Gulf Prod. Co. 5 657
W. S. Christian, W. Scott Heywood 1 160
Smith, Holmes, Currie & McKnight 2 250
Kingsland, J. K. Hughes Dev. Co. 8-A 100
Kingsland, J. K. Hughes Dev. Co. 10-A. 150
Kingsland, J. K. Hughes Dev. Co. 11-A. 550
Kingsland, J. K. Hughes Dev. Co. 17-A 100
Kingsland, J. K. Hughes Dev. Co. 1-B 200
Smith, Dan A. Japhet 1 abd
Smith, Dan A. Japhet 2 900
Smith, McIlroy & Herring 3 500
Johnson-Martin Gray, McMan Oil & Gas Co. 1 3315
Johnson-Wheatley, McMan Oil & Gas Co. 1 100
Smith, McMan Oil & Gas Co. 6 300
Johnson, Marland Oil Co. 1-A 200
Johnson, Marland Oil Co. 2-A 1350
Johnson, Marland Oil Co. 3-A 850
Johnson, Marland Oil Co. 4-A 6500
Perkins-Dial, Marland Oil Co. 3 400
Weatherly, Marland Oil Co. 1-A 80
Whittenburg, Marland Oil Co. 1-A 200
Whittenburg, Marland Oil Co. 3-A 1700
Whittenburg, Marland Oil Co. 5-A 4120
Whittenburg, Marland Oil Co. 7-A 600
Smith, Midwest Exploration Co. and Holmes 4 450
Twitchell, Murchison & Fain 1 500
Johnson-Barnum, Phillips Pet. Co. 2 100
Johnson-Graham, Phillips Pet. Co. 3 200
Johnson-Stephens, Phillips Pet. Co. 1 30
Jeanette Kingsland, Phillips Pet. Co. 1. 80
Whittenburg-Jerry, Phillips Pet. Co. 4 1200
Whittenburg-Huff, Phillips Pet. Co. 2 200
Whittenburg-Huff, Phillips Pet. Co. 4 300
Whittenburg, Phillips Pet. Co. and Coble Oil Co. 5 200
Whittenburg, Phillips Pet. Co. and Coble Oil Co. 8 450
Whittenburg, Phillips Pet. Co. and Coble Oil Co. 9 600
Whittenburg, Phillips Pet. Co. and Coble Oil Co. 11 100
Whittenburg, Phillips Pet. Co. and Coble Oil Co. 12 100
Whittenburg, Phillips Pet. Co. and Coble Co. 13 1000
Kingsland, Phillips Pet. Co. and Gibson Oil Corp. 1 100
Whittenburg, Phillips Pet. Co. and Gibson Oil Corp. 2 200
Whittenburg, Phillips Pet. Co. and Gibson Oil Corp. 3 1000
Whittenburg, Phillips Pet. Co. and Gibson Oil Corp. 4 75
Whittenburg, Phillips Pet. Co. and Gibson Oil Corp. 5 100
Whittenburg, Phillips Pet. Co. and Gibson Oil Corp. 6 200
Johnson, Phillips Pet. Co. and Pulaski Oil Co. 2 1000
Smith-Capers, Phillips Pet. Co. and Pulaski Oil Co. 2 600
Smith-Capers, Phillips Pet. Co. and Pulaski Oil Co. 3 500
Johnson, Prairie Oil & Gas Co. 2-A 200
Johnson, Prairie Oil & Gas Co. 8-A 700
Johnson, Prairie Oil & Gas Co. 10-A 100
Johnson, Prairie Oil & Gas Co. 16-A 2000
Smith, Roxana Pet. Corp. 5-B 30
Johnson, Ryan Pet. Corp. 2 100
Whittenburg, Shamrock Pet. Corp. 2 400
Johnson, Skelly Oil Co. 1 2373
Kingsland, Skiatex Oil Co. 4 200
Whittenburg, Smith & Bynum 2 1250
Smith, Spring Creek Oil Co. 2 750
Smith, Spring Creek Oil Co. 3 800
Smith, Sunburst Oil Co. 1 600
J. A. Whittenburg, Sunny Jim Oil Co. 2 300
Smith, Triangle Oil Co. 3 2000
Whittenburg, Westex Oil Co. 4 200
Whittenburg, Westex Oil Co. 5 500
Whittenburg, Westex Oil Co. 7 600
Johnson-Grace, White Eagle O. & R. Co. 1 100
Johnson-Hagy, White Eagle O. & R. Co. 1 25
Johnson-Hagy, White Eagle O. & R. Co. 8 50
Smith-Capers, White Eagle O. & R. Co. 2 200
Smith-Capers, White Eagle O. & R. Co. 4 500
Whittenburg, White Eagle O. & R. Co. 1 500
Whittenburg, Skelly Oil Co. 5 180
Wells completed 98
Production 62,285

WHEELER COUNTY
J. H. Shelton, Midwest Exploration Co. 1 (10,000,000) gas
Fee, Upham Gas Co. 1 (30,000,000) gas
Wells completed 2
Gas 2
Gas production 40,000,000

CARSON COUNTY
Rigs
Sec. 69, Blk. 12, Deeds, W. A. Gamble 1.
Sec. 116, Blk. 5, Burnett, Gulf Production Co. 18, 19, 20.
Sec. 127, Blk. 5, Burnett, Humble Oil & Ref. Co. 1.
Sec. 116, Blk. 5, Burnett, Marland Oil Co. 7-A.
Sec. 5, Blk. 5, Deahl, Prairie Oil & Gas Co. 1.
Wells Drilling
Sec. 22, Blk. Y2, Poling, Amatex Oil Co. 1.*
Sec. 115, Blk. 5, Burnett, American Refining Co. 3-A (6)*, 7, 8, 9, 10.
Sec. 127, Blk. 5, Burnett, Empire Gas & Fuel Co. 1.
Sec. 107, Blk. 5, Burnett, Gates Oil Co. 2.*
Sec. 1, Blk. 7, Witter, Gibson Oil Corp. 1.*
Sec. 116, Blk. 5, Burnett, Gulf Production Co. 12, 13.
Sec. 106, Blk. 5, Burnett, Gulf Production Co. 15.
Sec. 128, Blk. 5, Burnett, Gulf Production Co. 17.
Sec. 12, Blk. 4, Burnett, Humble Oil & Ref. Co. 1.
Sec. 115, Blk. 5, Burnett, Magnolia Petroleum Co. 2,* 3.
Sec. 107, Blk. 5, Burnett, Marland Oil Co. 7.
Sec. 116, Blk. 5, Burnett, Marland Oil Co. 2-A, 6-A.
Sec. 127, Blk. 5, Burnett, Marland Oil Co. 5-A.
Sec. 105, Blk. 5, Burnett, Marland Oil Co. 1-C.* 2-C, 3-C.
Sec. 103, Blk. 4, Garner, Republic Production Co. 1.
Sec. 92, Blk. 4, Bryan, Roxana Petroleum Corp. 1.
Sec. 115, Blk. 5, Burnett, W. W. Silk 6.
Sec. 114, Blk. 5, Burnett, Sunny Jim Oil Co. 3.*
Sec. 113, Blk. 5, Burnett, The Texas Co. 4.
Sec. 92, Blk. 5, Burnett, The Texas Co. 8.
Sec. 127, Blk. 5, The Texas Co. 9.
Sec. 114, Blk. 4, White Deer Oil Co. 1.
Rigs, 7; wells drilling, 24; wells shut down, 7; total 38.

GRAY COUNTY
Rigs
Sec. 111, Blk. B2, Turneau, Archer Blake 1.
Sec. 69, Blk. B2, Jackson, Canyon Oil & Gas Co. 1.
Sec. 12, Blk. 25, Kruse, Eller 1.
Sec. 86, Blk. 3, Osborne, Humble Oil & Ref. Co. 1.
Sec. 82, Blk. 3, Merten Bros., Magnolia Petroleum Co. 2, 3, 7.
Sec. 83, Blk. 3, Worley & Reynolds, McMan Oil & Gas Co. 2, 7.
Sec. 80, Blk. 3, Cabbell, Pampa Oil & Gas Co. 1.
Sec. 82, Blk. 3, Merton, Phillips Petroleum Co. 1, 2.
B. Cheney Survey, Finley, Roxana Petroleum Corp. 1.
Sec. 82, Blk. 3, Merten, Shamrock Petroleum Co. 3.
Sec. 83, Blk. 3, Worley & Reynolds, Shamrock Petroleum Corp. 5, 6.
Sec. 87, Blk 3, Holmes, The Texas Co. 2.
Sec. 81, Blk. 3, Saunders, The Texas Co. 2.
Sec. 44, Blk. 25, Back, Travis et al 1.
Sec. 114, Blk. M2, Talley, Weir, Cribs & Finklea 1.
Sec. 62, Blk. 3, Worley & Reynolds, Wilcox-Pampa Oil & Gas Co. 7.
Wells Drilling
Sec. 92, Blk. B2, Bowers, Barnett and others 1.*
Sec. 148, Blk. B2, Bradford, Bayshore Petroleum Co. 1.
Sec. 33, Blk. 25, Dial, Constantine et al 1.
Sec. 10, Blk. A6, Noble, Cranfill et al 1.
Sec. 66, Blk. B2, Hopkins, Eagle Creek Oil Co. 1*
Sec. 64, Blk. 3, Benton, Empire Gas & Fuel Co. 1.
Sec. 129, Blk. 3, Hugey, Empire Gas & Fuel Co. 1.
Sec. 161, Blk. 3, Wull, Empire Gas & Fuel Co. 1.
Sec. 63, Blk. 3, Worley, Empire Gas & Fuel Co. 1.
Sec. 26, Blk. B2, Lovett, Jack Greenwood et al 1.*
Sec. 87, Blk. 3, Holmes, Gulf Production Co. 1.
Sec. 175, Blk. 3, McConnell, Gulf Production Co. 1.
Sec. 88, Blk. 3, Merten, Gulf Production Co. 1.
Sec. 83, Blk. 3, Worley, Gulf Production Co. 1, 2, 3, 4, 5.
Sec. 87, Blk. 3, Merten, Humble Oil & Ref. Co. 1, 2, 3, 4.*
Sec. 83, Blk. 3, Worley & Reynolds, Humble Oil & Ref. Co. 1, 2, 3, 4.
Sec. 17, Blk. 1, Williams, Magdeline Oil Co. 1.*
Sec. 82, Blk. 3, Merten, Magnolia Petroleum Co. 1, 4, 5, 6, 8, 9, 10, 11, 12.
Sec. 63, Blk. 3, Benton, Marland Oil Co. 1.
Sec. 87, Blk. 3, Merten, McMan Oil Co. 1.
Sec. 83, Blk. 3, Worley & Reynolds, McMan Oil & Gas Co. 1 ,4, 5, 8.
Sec. 68, Blk. 25, Morris, O'Brien 1.
Sec. 63, Blk. 3, Benton, Pure Oil Co. 1, 2, 3.
Sec. 82, Blk. 3, Merten, Shamrock Petroleum Co. 2.
Sec. 83, Blk. 3, Worley & Reynolds, Shamrock Petroleum Co. 2, 3, 4.
Sec. 83, Blk. 3, Worley & Reynolds, Sun Oil Co. 1, 2.
Sec. 87, Blk. 3, Holmes, The Texas Co. 1.
Sec. 58, Blk. 3, Combs & Worley, Wilcox-Pampa Oil & Gas Co. 2.*
Sec. 62, Blk. 3, Worley & Reynolds, Wilcox-Pampa Oil & Gas Co. 5, 6, 8, 9, 10, 11, 12, 13, 14.
Sec 188, Blk. 3, Bryan, Young and others 1.
Sec. 106, Blk. 3, Holmes, Young and others 1.
Rigs, 21; wells drilling, 59; shut down, 6; total, 86.

HUTCHINSON COUNTY
Rigs
Sec. 20, Blk. 47, Whittenburg, Amerada Pet. Corp. 3.
Sec. 21, Blk. 47, Whittenburg, Amerada Pet. Corp. 2.* 4-A.
Sec. 3, Blk. B-4, Pritchard, Barnsdall Oil Corp. 1.
Sec. 24, Blk. M21, Hale, Bozo Oil Co. 1.
Sec. 13, Blk. Y, Whittenburg, Brookins & Kistler 2.
Sec. 10, Blk. Y, Smith, Currie and others 1.
Mary Whitley, Tr. 4, Johnson, Devonian Oil Co. 6.
Sec. 23, Blk. M23, Jasper, Dominion Oil Co. 1.
Sec. 24, Blk. M21, Haile, Donald Oil Co. 1.
Sec. 11, Blk. Y, Smith, Echo Oil Co. 3.
Sec. 68, Blk. 46, Johnson, Empire Gas & Fuel Co. 2-A, 3-A.
Sec. 19, Blk. Y, Weatherly, Empire Gas & Fuel Co. 8, 9.
Coble, Get Oil Co. 1.
Mary Whitley Survey, Whittenburg, Gulf Production Co. 7-A, 8-A, 9-A.
Sec. 5, Blk. Y, Smith, Herring & McIlroy 6.
Sec. 31-A, Blk. B, Christian, W. Scott Heywood 2, 3.
Sec. 6, Blk. B4, Kingsland, J. K. Hughes Dev. Co. 3-B.
Sec. 13, Blk. Y, Whittenburg, Kistler & Lemix 1, 2.
Sec. 6, Blk. 1, Johnson, Marland Oil Co. 1.
Sec. 20, Blk. Y, Johnson, Marland Oil Co. 5-A, 7-A.
Sec. 15, Blk. Y, Smith, Marland Oil Co. & Wright 1.
Mary Whitley Survey, Whittenburg, Marland Oil Co. 9-A, 10-A, 11-A, 12-A, 13-A.
Sec. 21, Blk. Y, Johnson-Martin Gray, McMan Oil & Gas Co. 4.
Sec. 5, Blk. Y, Smith, Midwest Refining Co., Holmes and Curry 4.
Sec. 12, Blk. Y, Terrel, Midwest Refining Co. 3.
Sec. 50, Blk. M23, Luginbyhl, Panfield Oil Co. 1.
Sec. 5, Blk. Y, Panhandle Refining Co. 1.
Sec. 12, Blk. Y, Smith, Panhandle Ref. Co. 1.
Mary Whitley Survey, Whittenburg-Burg, Phillips Pet. Co. 3.
Tomlinson Survey, Whittenburg-Eller, Phillips Pet. Co. 3, 4, 5.
Sec. 21, Blk. Y, Johnson-Gordon, Phillips Pet. Co. 4, 5.
Sec. 4, Blk. Y, Kingsland-Jeanette, Phillips Co. 3.
Sec. 1, Blk. Z02, Martin, Phillips Pet. Co. 3, 4.
Sec. 67, Blk. 46, Whittenburg-Patburg, Phillips Pet. Co. 3.
M. Whitley Survey, Whittenburg-Phillips Pet. Co. and Gibson Oil Corp. 5.

Sec. 65, Blk. 46, Whittenburg-Whit, Phillips Pet. Co. 1, 2, 3.
W. C. Christian Survey, Christian, Plains Drilling Co. 2.
Sec. 24, Blk. M21, Hale, Polecat O'l Co. 1.
Sec. 21, Blk. Y, Johnson, Prairie Oil & Gas Co. 22-A.
Sec. 20, Blk. Y, Johnson, Prairie Oil & Gas Co. 23-A.
Sec. 70, Blk. 46, Johnson, Pure Oil Co. 1-B.
M. Whitley, Tr. 9, Johnson, Ryan Pet. Co. 3.
Sec. 4, B4, Cunningham, Skelly Oil Co. 4.
Sec. 20, Blk. Y, Johnson, Skelly Oil Co. 6, 7.
Sec. 3, Blk. B4, Pritchard, Skelly Oil Co. 1.
Sec. 13, Blk. Y, Whittenburg, Summit Oil Co. 3.
Sec. 14, Blk. Y, Smith, Sunburst O'l Co. 3, 4.
Sec. 12, Blk. Y, Whitten urg, Sunny Jim Oil Co. 4.
Sec. 5, Blk. Y, Smith, Triangle Oil Co. 4.
Sec. 4, Blk. Y, Kingsland, Wall & Morrison 1.
Sec. 3, Blk. Y, Cockrell, Ward & Snell 2.
Sec. 4, Blk. B4, Johnson-Grace, White Eagle Oil & Ref. Co. 2.
Sec. 4, Blk. B4, Hedgecoke, White Eagle Oil & Ref. Co. 2.
Sec. 64, Blk. 46, Johnson, White Eagle Oil & Ref. Co. 3.
Lot 4, Johnson-Underwood, White Eagle Oil & Ref. Co. 1.

Wells Drilling

Sec. 2, Blk. B3, Cockrell, Alaska Pet. Co. 1.
Sec. 13, Blk. Y2, Bivins, Amarillo Oil Co. B-4.
Sec. 20, Blk. 47, Whittenburg, Amerada Pet. Corp. 2.
Sec. 21, Blk. 47, Whittenburg, Amerada Pet. Corp. 3.
Sec. 89, Blk. Z, Whittenburg, Amerada Pet. Corp. 4-B. 5-B.
Sec. 19, Blk. Y, Weatherly, American Ref. Co. 1, 2, 3.
Sec. 2, Blk. 4, Whittenburg, American Ref. Co. 2.
Sec. 1, Blk. J, Yake, Anderson & Pritchard 1.
Sec. 5, Blk. M23, Lewis, Badger 2.
Sec. 3, Blk. B4, Pritchard, Barnsdall Oil Corp. 1.
Sec. 37, Blk. 47, Merchant, Big Creek Oil Co. 1.
Sec. 13, Blk. Y, Whittenburg, Brookins & Kistler 1.
Sec. 14, Blk. Y, Smith, Buffalo Oil Co. 1.
Sec. 4, Blk. Y, Kingsland, Canadian River Oil Co. 5.
Sec. 12, Blk. Y, Whittenburg, Canyon Oil & Gas Co. 1, 4.* 5.*
Sec. 1, Blk. B4, Pritchard, Center Dome Oil Co. 2.*
Sec. 35, Blk. 47, Yake, Clark & Hagy 1.
Sec. 12, Blk. Y, Whittenburg, Coble Oil Co. and Whittenburg 1.
Sec. 14, Blk. Y, Smith, Cockrell & McIlroy 3, 4.
Sec. 14, Blk. Y, Smith, Currie & Phillips 2, 3, 4.
Sec. 20, Blk. Y, Johnson-Grace, Delmar Oil Co. 1, 2, 3, 4.
M. Whitley, Tr. 3, Johnson, Devonian Oil Co. 4.
M. Whitley, Tr. 4, Johnson, Devonian Oil Co. 5.*
Sec. 66, Blk. 46, Johnson, Devonian Oil Co. 1-A.
Sec. 11, Blk. Y, Smith, Dixon Creek Oil Co. 11.
Sec. 14, Blk. Y, Smith, Dixon Creek Oil Co. 12.* 17-A.* 19, 20.
Sec. 12, Blk. Y, Smith, Dixon Creek Oil Co. 27.* 28.
Sec. 5, Blk. Y, Smith, Dixon Creek Oil Co. 35.
Sec. 15, Blk. X02, Whittenburg, Dougles Oil Co. 2-B.*
Sec. 13, Blk. Y, Whittenburg, Dunnigan et al 2.
Sec. 11, Blk. Y, Smith, Echo Oil Co. 1, 4.
Sec. 21, Blk. Y, Johnson, Empire Gas & Fuel Co. 1-B.
Sec. 19, Blk. Y, Weatherly, Empire Gas & Fuel Co. 2, 4, 5, 6, 7.
Sec. 19, Blk. Y, Weatherly, Fly-Blackburn Oil Co. 2.
Sec. 18, Blk. M23, McCormick, Gibson Oil Corp 1.
Sec. 27, Blk. 47, Whittenburg, Goldeline Oil Co. 1-A, 2-A.*
Sec. 89, Blk. Z, Whittenburg, Goldeline Oil Co. 1-B, 2-B.
Sec. 24, Blk. 47, Whittenburg, Goldeline Oil Co. 1-C.*
Sec. 15, Blk. X02, Whittenburg, Goldeline Oil Co. 1-H.
Sec. 8, Blk. M23, Lewis, Gopher Oil Co. 1.
Sec. 128, Blk. 5, Burnett, Gulf Production Co. 16.
Mary Anglin Survey, Christian, Gulf Production Co. 1.
W. S. Christian Survey, Christian, Gulf Prod Co. and Panhandle Ref. Co. 1.
Sec. 3, Blk. Y, Cockrell, Gulf Production Co. 2, 3, 4.
Sec. 90, Blk. Z, Dial, Gulf Production Co. and Panhandle Refg. Co. 11, 12.
Sec. 1, Blk. 1, Dial, Gulf Production Co. and Panhandle Refg. Co. 14.* 16.
Sec. 24, Blk. 47, Dial, Gulf Production Co. and Panhandle Refg. Co. 15.*
Sec. 25, Blk. 47, Dial, Gulf Production Co. and Panhandle Refg. Co. 17, 18, 19, 20.
Sec. 1, Blk. X02, Whittenburg, Gulf Production Co.-Dial 21, 22, 25*.
Sec. 1, Blk. 1, Whittenburg, Gulf Production Co. 23.
Sec. 1, Blk. 1, Whittenburg, Gulf Production Co.-Dial 24.
Sec. 16, Blk. X02, Dial, Gulf Production Co. and Panhandle Refg. Co. 25.
Sec. 66, Blk. 46, Dial, Gulf Production Co. 4, 5, 6, 7, 8.
Sec. 70, Blk. 46, Johnson, Gulf Production Co. 9, 10, 11, 12.
Sec. 75, Blk. 46, Sandford, Gulf Production Co. 1.
Mary Whitley Survey, Whittenberg, Gulf Production Co. 4, 5, 1.
Sec. 32, Mary Whitley Survey, Whittenberg, Gulf Production Co. A2.
Mary Whitley Survey, Whittenberg, Gulf Production Co. 6A.
Sec. 89, Blk. Z, Whittenberg, Gulf Production Co. and Panhandle Refg. Co. B2.
Sec. 27, Blk. 4Z, Whittenberg, Gulf Production Co. and Panhandle Refg. Co. 2D.
Sec. 65, Blk. 46, Whittenberg, Gulf Production Co. and Panhandle Refg. Co. 1E.
Sec. 65, Blk. 46, Whittenberg, Gulf Production Co. 2E, 3E, 4E, 5E.
Sec. 66, Blk. 46, Johnson, Hagey 1.*
Sec. 33, Blk. M21, Harvey, Harvey Oil Co. 1.*
Sec. 5, Blk. Y, Smith, Herring-McIlroy 5.
Sec. 14, Blk. Y, Smith, Heywood-Phillips Pet Co. 2.
Sec. 6, Blk. Y, Kingsland, J. K. Hughes Development Co. 4.
Sec. 6, Blk B4, Kingsland, J. K. Hughes Development Co. 5.
Sec. 6, Blk. Y, Kingsland, J. K. Hughes Development Co. 8A, 10A, 16A.
Sec. 6, Blk. B4, Kingsland, J. K. Hughes Development Co. 2B, 4B.
Sec. 4, Blk. M18, Thompson, Inspiration Oil & Gas Co. 1.
Sec. 11, Blk. Y, Smith, Dan Japhet 3, 4.
Sec. 11, Blk. Y, Smith, Lenix & Stover 2.
Sec. 11, Blk. Y, Smith, Lucky Ten Oil Co. 2.* 3.* 4.*
Sec. 5, Blk. L, Harvey, Madden et al 1.
Sec. 128, Blk. 5, Burnett, Marland Oil Co. 1D.
Sec. 20, Blk. Y, Johnson, Marland Oil Co. 6A, 8A.
Sec. 1, Blk. Z02, Perkins-Dial, Marland Oil Co. 1, 2, 4, 5, 6, 7, 8.
Sec. 16, Blk. X02, Perkins-Dial, Marland Oil Co. 1A.
Sec. 29, Blk. 47, Reimer Martha, Marland Oil Co. 1.
Sec. 76, Blk. 46, River Bed, Marland Oil Co. 1.
Sec. 19, Blk. Y, Weatherly, Marland Oil Co. 3A, 4A, 1B, 2B, 3B, 1C, 2C, 3C.
Sec. 65, Blk. 46, Whittenberg, Marland Oil Co. 1, 2, 3, 4, 5.
Mary A. Whitley Survey, Whittenberg, Marland Oil Co. 1A.* 2A 4A, 6A, 8A.
Sec. 8, Blk. 15, Jones, Matthewson 1.
Sec. 14, Blk. Y, Smith, McIlroy 1, 2, 3.
Sec. 14, Blk. Y, Smith, McIlroy & Kistler 4, 5, 6.
Sec. 14, Blk. Y, Smith, S. D. & W. W. McIlroy 4, 7, 8.
Sec. 12, Blk. Y, Smith, McKnight & Holmes 3.
Sec. 65, Blk 46, Archer, McMan Oil Co. 1, 2.
Sec. 65, Blk. 46, Whittenberg, McMan Oil Co. 3.
Sec. 5, Blk. Y, Smith, McMan Oil Co. 7.
Sec. 5, Blk. Y, Servey Holmes, McMan Oil Co. 8.
Sec. 21, Blk. Y, Martin Gray, McMan Oil Co. 2, 3.
Sec. 66, Blk. 46, Wheatley, McMan Oil Co. 2, 3, 4.
Sec. 7, Blk. Y, Smith, Middleton Oil Co. 1.*
Sec. 5, Blk. Y, Dick, Midwest Exploration Co. 1.
Sec. 70, Blk. 46, Johnson, Midwest Exploration Co. 1.
Sec. 5, Blk. Y, Smith, Midwest-Holmes & Curry 1, 2.
Sec. 20, Blk. Y, Johnson, Minnehome Oil Co. 1.
Twitchell Survey, Twitchell, Murchison & Fain 2.*
Sec. 3, Blk. Y, Cockrell, Newby Oil Co. 2.
Sec. 4, Blk. Y, Kingsland, New Domain Oil Co. 2.
Sec. 82, Blk. 46, Sandford, Paramount Oil Co. 1.*
Sec. 5, Blk. Y, Smith, Phillips Jr. 1.
Sec. 12, Blk. Y, Smith, Phillips Petroleum Co. et al 2, 3.
Sec. 84, Blk. 46, Bivins, Phillips Petroleum Co. 1.
Mary Whitley Survey, Burg, Phillips Petroleum Co. 1, 2.
Sec. 13, Blk. Y, Whittenberg, Phillips Petroleum Co.-Coble 14, 15, 16, 17, 18, 19.
Sec. 64, Blk. 46, Johnson, Phillips Petroleum Co.-Dorset. 1.*
Tomilson Survey, Whittenberg, Phillips Petroleum Co.-Ellar 1.
Sec. 2, Mary Whitley Survey, Whittenberg, Phillips Pet. Co.-Florence 1.
Sec. 21, Blk. Y, Johnson, Phillips Petroleum Co.-Gordon 1.* 2, 3.
Tract 5, M. Whitley Survey, Whittenberg, Phillips Pet. Co.-Graham 2.
Mary Whitley Survey, Whittenberg, Phillips Pet. Co.-Haines 1, 2.
Sec. 6, Blk. B4, Kingsland, Phillips Petroleum Co. 2.
Sec. 4, Blk. Y, Kingsland, Phillips Petroleum Co.-Gibson 1.
Sec. 4, Blk. Y, Jeanette Kingsland, Phillips Petroleum Co. 1, 2.
Sec. 28, Blk. Y, Johnson, Phillips Petroleum Co.-Whitehead. 1.*
Sec. 1, Blk. X02, Martin, Phillips Petroleum Co. 1, 2.
Sec. 66, Blk. 46, Johnson, Phillips Petroleum Co.-Montford 1.
Sec. 68, Blk. 46, Neil, Phillips Petroleum Co. 1.*
Sec. 72, Blk. 46, Stevens, Phillips Petroleum Co. 1.
Mary Whitley Survey, Whittenberg, Phillips Petroleum Co.-Patton, 1, 2, 3, 4, 5.
Sec. 67, Blk. 46, Whittenberg, Phillips Petroleum Co.-Patburg 2.
Sec. 13, Blk. Y, Whittenberg, Phillips Petroleum Co.-Parks 3, 5.
Sec. 2, Blk — Perkins, Phillips Petroleum Co. 2.
Sec. 6, M. Whitley Survey, Whittenberg, Phillips Petroleum Co.-Walling 1.
M. Whitley Survey, Whittenberg, Phillips Petroleum Co.-Gibson 2, 3, 4.
Sec. 65, Blk. 46, Whittenberg, Phillips Petroleum Co.-Whitt 4.
M. Whitley Survey, Johnson, Phillips Petroleum Co.-Williams 2.
Sec. 12, Blk. Y, Whittenberg, Phillips Petroleum Co. 4.
W. C. Christian, Christian, Plains Drilling Co. 4.
Sec. 64, Blk. 46, Johnson, Prairie Oil & Gas Co. 3A.* 4A, 5A, 17A, 20A.
Sec. 20, Blk. Y, Johnson, Prairie Oil & Gas Co. 6A, 7A, 9A, 10A.
Sec. 26, Blk. Y, Johnson, Prairie Oil & Gas Co.-Phillips Pet. Co. 11A, 12A, 14A, 15A.
Sec. 20, Blk. Y, Johnson, Prairie Oil & Gas Co. et al 18A, 19A, 21A.
Sec. 4, Blk. B4, Johnson, Prairie Oil & Gas Co. et al 2B.
Sec. 69, Blk. 46, Johnson, Prairie Oil & Gas Co. et al 3B, 4B.
Sec. 23, Blk. Y, Weatherly, Prairie Oil & Gas Co. et al 3.
Sec. 19, Blk. Y, Weatherly, Prairie Oil & Gas Co. et al 7, 8.
Sec. 11, Blk. Y, Smith, Relief Oil Co. 2, 3, 4.
Sec. 12, Blk. Y, Smith, Henry Riley 1.
Sec. 11, Blk. Y, Smith, Riley & Holmes 2.
Sec. 86, Blk. M26, Jasper, Roxana Petroleum Co. 1.
Sec. 14, Blk. Y, Smith, Roxana Petroleum Co. 4B.
M. Whitley Survey, Whittenberg, Shamrock Oil Co. 1, 3.
Sec. 95, Blk. 5, Jarvis, W. W. Silk 1.
Sec. 4, Blk. 47, Cunningham, Skelly Oil Co. 2.
Sec. 20, Blk. Y, Johnson, Skelly Oil Co. 1, 2, 3, 4, 5.
Sec. 22, Blk. 5, Whittenberg, Skelly Oil Co. 4.
Sec. 6, Blk. Y, Kingsland, Skiatex Oil Co. 3.
Sec. 7, Blk. X, Smith, Smith, 2.*
Sec. 12, Blk. Y, Whittenberg, Smith Bynum 2.
Sec. 5, Blk. Y, Smith, Spring Creek Oil Co. 4.
Sec. 13, Blk. Y, Whittenberg, Summit Oil Co. 1.
Sec. 14, Blk. Y, Smith, Sunburst Oil Co. 2.
Sec. 33, Blk. Z, Lydl, Sunrise Oil Co. 1.
Sec. 8, Blk. B3, Cockrell, Swindler et al.
Sec. 132, Blk. 5, Burnett, Texas Oil Co. 7.
Sec. 1, Tomlinson Survey, Johnson, Texo Oil Co. 1.
Sec. 6, Blk. Y, Kingsland, Travelers Oil Co. 3.
Sec. 5, Blk. Y, Smith, Triangle Oil Co. 1, 3.
Sec. 34, Blk. 47, Merchant, Wentz Oil Co. 1.
Sec. 2A, Blk. M26, Reimer, Wentz Oil Co. 1.
Sec. 13, Blk. Y, Whittenberg, Westex Oil Co. 6.* 8, 9.
Sec. 4, Blk. B4, Grace-Johnson, White Eagle Oil Co. 1.
Hedgecoke, White Eagle Oil Co. 1, 3, 4.
Sec. 64, Blk. 46, Hagy-Johnson, White Eagle Oil Co. 1, 8.
Sec. 64, Blk. 46, Johnson, White Eagle O'l Co. 2, 4, 7, 8.
Sec. 11, Blk. Y, Smith, White Eagle Oil Co. 1, 2.
Sec. 12, Blk. Y, Whittenberg, White Eagle Oil Co. 1.

COLLINGSWORTH COUNTY
Wells Drilling

Sec. 5, Blk. 13, Williams & Combs, Gibson Oil Co. 1.*
Sec. 30, Blk. 16, Norwood, Martin et al 1.

DALLAM COUNTY
Wells Drilling

Section 9, Block 47½, James, Dalhart Oil & Gas Co. 1.

DONLEY COUNTY
Wells Drilling

Sec. 39, Blk. C3, Boyce, A. T. Drilling Co. 1.

HANSFORD COUNTY
Rigs

Sec. 22, Blk. 22, Capitol Lands, McKana 1.
Sec. 3, Blk. LS, Collins, McKana, 1.
Wells Drilling
Sec. 9, Blk. 2, Layman-Balfour, Deep Rock Oil Co. 1.
Sec. 13, Blk. 13, Irving, L. L. Eslock 1.
Sec. 58, XR, Coats, Holmes 1.*
Sec. 63, Shelton, Humble Oil & Refining Co. 1.
Sec. 1, Blk. B8, Shelton, Kork Oil Co. 1.*
Capitol Lands, Shelton, McKana 1.

HEMPHILL COUNTY
Rigs

J. S. Hood Survey, Hoover, Hoover 1.
Wells Drilling
Sec. 1, Portevent Survey, Alexander, Domning et al.
Sec. 4, Shaller, Hoover 1.*
Sec. 40, Blk. A2, George, Mitchell et al 1.

LIPSCOMB COUNTY
Wells Drilling

Sec. 504, Blk. 43, Barton, Snyder et al 1.

MOORE COUNTY
Rigs

Sec. 122, Blk. 44, Beauchamp, Douglas Oil Co. 1.
Sec. 28, Blk. 44, Kilgore, Humble Oil & Refining Co. 1.
Sec. 191, Blk. 3T, Ruckert, Morton et al 1.
Sec. 237, Blk. 44, Dumas Townsite, Shadley Bros. 1.
Wells Drilling
Sec. 59, Blk. 018, Masterson, Amarillo Oil Co. 1.*
Sec. 19, Blk. 44, Thompson, Amarillo Oil Co. 1.*
Sec. 68, Blk. 3, Sneed, Cadman & Martin 1.
Sec. 25, Blk. 1, Sneed, Flowers 1.
Sec. 58, Blk. 6T, Sneed, Master Oil Co. 1.
Sec. 30, Blk. 6T, Sneed, Moore Oil Co. 1.*
N. Jones Survey, Sneed, Phillips Petroleum Co. 1.
Sec. 66, Blk. 6T, Sneed, Prairie Oil & Gas Co. 2.*
Sec. 16, Blk. M1, Gober, Shamrock Petroleum Co. 1.

OCHILTREE COUNTY
Wells Drilling

Sec. 579, Blk. 43, Stickler, Burton 1.
Sec. 144, Blk. 43, Womble, Hamilton et al 1.*
Sec. 471, Blk. 43, Wright, Harris & Shauffer 1.
Sec. 923, Blk. 43, Bowen, Standard Development Co. 1.*

POTTER COUNTY
Wells Drilling

Sec. 25, Blk. 018, Bivins, Amarillo Oil Co. A5.
Sec. 4, Blk. JAD, Fuqua, Amarillo Oil Co. 1.
Sec. 89, Blk. 9, Bush, Gulf Production Co. 1.

ROBERTS COUNTY
Rigs

Sec. 179, Blk. 42, Tandy, Pan State Oil Co. 1.
Hammon, Trammel et al 1.
Wells Drilling
Sec. 7, Blk. A5, Ledwick, Big Bend Oil Co. 1.*
Sec. 106, Blk. C, Jones, Gibson Oil Co. 1.
Clay County School Land, Hammon, Chas. Page et al 1.
Sec. 29, Blk. B1, Mead, Pettijohn. 1.

SHERMAN COUNTY
Wells Drilling

Sec. 35, Blk. 2, Bivins, Eclipse Drilling Co. 1.*
Sec. 35, Blk. 3B, Bivins, Get Oil Co. 1.*
Sec. 161, Blk. 1C, Jones, Phillips Petroleum Co. 1.

WHEELER COUNTY
Rigs

Sec. 40, Blk. 24, Farris, Boyles & Johnson 1.
Sec. 41, Blk. B24, Phillips, Gibson Oil Co. 2.
Sec. 41, Blk. 24, Phillips, Gibson Oil Co. 4.
Sec. 10, Blk. 27, Laycock, Laycock et al 1.
Sec. 88, Blk. A5, Johnson, Smith et al 1.
Sec. 1, Blk. 24, Griswold, Upham Gas Co. 1.
Sec. 89, Blk. 17, Martin, Upham Gas Co. 1.
Sec. 92, Blk. 17, Strickey, Upham Gas Co. 1.
Wells Drilling
Sec. 42, Blk. 24, Bentley, Gibson Oil Co. 1.*
Sec. 70, Blk. 23, Rochelhaffer, McFarland Oil Co. 1.*
Sec. 12, Blk. 27, Compary, Mid-Kansas Oil Co. 1.
Sec. 55, Blk. 24, Bikley-Crain, Murchison & Fain. 1.
Sec. 11, Blk. 27, Jackson, Scott & Varner, 1.
Sec. 53, Blk. A4, Sorenson, South Vernon Oil Co. 1.*
Sec. 12, Blk. 27 Compary, Texhoma Oil & Refining Co. 1.
Sec. 88, Blk. 17, George, Upham Gas Co. 1.*
Sec. 92, Blk. 17, Newton, Upham Gas Co. 1.
Sec. 77, Blk. 7T, Ogorman, Vaughn 2.*
Sec. 13, Blk. A5, Woodley, Woodley 1.*

SOUTHWEST TEXAS

Summary of Operations

Field—	Com.	Prod.	Dry	Gas	Rgs	Drg.	Tl.
Luling	1	0	1	0	1	3	4
Mirando	*70	12,505	6	5	21	54	75
Somerset	1	12	0	0	0	2	2
Calliham	1	0	1	0	0	1	1
Rockdale-Minerva	5	60	0	0	1	8	9
Misc.	3	0	3	0	18	36	54
Total Aug.	81	12,577	11	5	41	104	145
Total, July	77	11,110	21	3	40	119	159
Difference	4	1,467	10	2	1	15	14

*Webb, Jim Hogg, Zapata and parts of Duval County.

EAST CENTRAL TEXAS

Summary of Field Operations

County—	Comp.	Prod.	Dry	Gas	Rigs	Drg.	Tl.
Limestone	16	22,028	3	0	15	31	46
Anderson	2	0	2	0	0	0	0
Navarro	1	65	0	0	0	8	8
Kaufman	1	0	1	0	0	0	0
Falls	1	8	1	0	0	1	1
Grimes	1	0	1	0	0	0	0
Milam	1	8	1	0	0	1	1
Cherokee	2	0	2	0	0	4	4
Miscel.	0	0	0	0	0	9	9
Total Aug.	25	22,093	11	0	15	54	69
Total July.	6	6,850	3	0	18	60	78
Difference	19	15,243	8	0	3	6	9

WELLS COMPLETED
Limestone County

Stockton, Pure Oil Co. 2 8
Rossen, Moss & Keeling 1 3248
Cochran, Transcontinental Oil 1 4100
Rossen, Transcontinental Oil 2 2500
A. E. Rossen, Transcontinental Oil 3 2780
A. E. Rossen, Transcontinental Oil 2-A 2500
Odell, Bass et al ..... abd
Odell, Cranfill et al 1 ..... abd
Suttle, Moss & Keeling 1 ..... abd
Odell, Pure Oil Co. 1 ..... abd
Odell, Pure Oil Co. 1 ..... dry
Odell, Pure Oil Co. 3, 4 ..... abd
Suttle, Stroube et al 1 ..... abd
Atkinson, Transcontinental Oil 1 1600
Atkinson, Transcontinental Oil 2 ..... dry
Cogdell, Transcontinental Oil 1 1500
Cogdell, Transcontinental Oil 3 1000
Odell, Transcontinental Oil 1 ..... dry
Odell, Transcontinental Oil 4 ..... abd
Suttle, Godfrey et al 1 ..... abd
D. Suttles, J. K. Hughes et al 1 ..... dry
Rossen, Atlantic O. P. 1 450
Rossen, Murchison & Fain 1 640
Hobbs, Pure Oil Co. 1 ..... abd
Rossen, Godley Oil 1 1692

Wells completed 16
Production 22,028
Dry 3
Gas 0

NOTE—Nine wells marked "abandoned" were not drilled to sand depth, but were given up as hopeless because of dry holes nearer production. They are not included as completed.

MISCELLANEOUS

Anderson County—
Greenwood, Navarro Oil Co. 1 ..... dry
Southern Pine Lbr. Co., Humble O. & R. 1 ..... dry
Navarro County—
Ross, Simms Oil Co. 16 .. 65
Kaufman County—
Williamson, J. D. Harper 1 ..... dry
Cherokee County—
Ousley, Humphreys Corp. 2 ..... dry
Clapp, Humphreys Corp. 2 ..... dry
Falls County—
Bargainer, Gulf Prod. 1 ..... dry
Grimes County—
Freund, Newblock Oil 1 ..... dry
Milam County—
Esperson, The Texas Company ..... abd

RIGS AND WELLS DRILLING
LIMESTONE COUNTY
Rigs

Atkins, Pure Oil 3.
Rossen, Transcontinental Oil 11.
Hargrove, Eisenmayer et al 1.
Erskine, Reiter-Foster Oil 2.
Erskine, Godley Oil 1.
Rossen, The Texas Company 1.
T. D. Ross, Transcontinental Oil 2.
Rossen, Transcontinental Oil 10.
Rossen, Transcontinental Oil 10-A, 11-A, 12-A, 13-A, 14-A.
Oliver, Shaffer et al 1.
Bassett, Pandem Oil 1.

Wells Drilling
Richardson, Wells et al 1*.
Atkins, Moss & Keeling 1.
Rossen, Moss & Keeling 2.
Atkins, Pure Oil 2 (sand) 3.
Atkins, Transcontinental Oil 3 (sand.)
Atkins, Transcontinental Oil 4 (sand.)
Odell, The Texas Company 1.
Cogsdell, Transcontinental Oil 2.
Cogsdell, Transcontinental Oil 4.
Rossen, Transcontinental Oil 7.
Rossen, Atlantic O. P. 2.
Rossen, Barclay & Meadows 1.
Negro Church Lot, Bass et al 1.
Rossen, Godley Oil 1-A.
F. Rossen, Godley Oil 2.
Rossen, Murchison & Fain 1.
Rossen, Shaffer et al 1.
Rossen, Simms Oil 1.
Rossen, Simms Oil 2-A.
Rossen, E. L. Smith Oil 1.
Maddock, Transcontinental Oil 1.
Erskine, Transcontinental Oil 1 (sand.)
A. E. Rossen, Transcontinental Oil 5, 6.
Rossen, Transcontinental Oil 1-A, 3-A, 4-A, 5-A (sand), 6-A, 7-A, 8-A.
Penner, Gillen & Hammond.
Rigs, 15; wells drilling, 31; total, 46.

MISCELLANEOUS
Rigs—None
Wells Drilling
Cherokee County—
Templeton, Humble O. & R.
Mills, Nicolle et al 1.
Boling, Humphreys Corp. 1.
Summers, Magnolia Pet. 1.
Ellis County—
Getzendenner, Magnolia Pet. 1.
Falls County—
Peacock, High Bank Oil Co. 1.
Freestone County—
Peckerns, Kechi Pet. 1*.
Henderson County—
Sterrett, Perdinand, Heine 1.
McVlueKey, Barclay et al 1.
Martin, Evans et al 1.
Hill County—
Rose, Johnson & Phelps 1.
Sanderson, Johnson & Phelps 1.
Hopkins County—
Brooks, Kelsey et al 1*.
Hunt County—
Tullall & Kelsey 1*.
Milam County—
Brown, Allen & Harper 1.
Navarro County—
Mitchell, Osborne et al 1.
Fallwood, Farish et al 1*.
Depp, Garland Kent 2.
Woolens, Garland Kent 2.
Rose, Simms Oil 12.
Swink, Sun Oil 1.
McClelland, McDonald Heirs 1.
Longbotham, Snowden & McSweeney 13*.
Rigs, 0; wells drilling, 22.

GULF COAST FIELDS

Summary of Field Operations

Dist.—	Comp.	Prod.	Dry	Gas	Rigs	Drg.	Ttl.
Boling	5	600	3	0	2	3	5
Batson	3	85	1	0	2	6	8
Blue Ridge	1	0	1	0	2	2	4
Barber Hill	2	400	0	0	2	2	4
Big Creek	1	1,200	0	0	0	2	2
Edgerly	2	200	0	0	0	2	2
Goose Creek	7	1,840	2	0	2	10	12
Humble	3	240	0	0	6	6	6
Hull	12	5,450	1	0	6	15	21
High Island	1	500	0	0	0	4	4
Jennings (La.)	2	575	0	0	0	3	3
Lockpt (La.)	2	500	0	0	1	6	7
Markham	2	150	1	0	0	0	0
Nash Dome	1	1,000	0	0	4	2	6
Orange	13	8,355	3	0	1	7	8
Orchard	0	0	0	0	0	1	1
Pierce Junct.	2	2,550	0	0	8	5	13
Piedras Pintas	4	250	3	0	0	2	2
Spindletop	16	59,800	1	0	21	40	61
Saratoga	1	25	0	0	1	2	3
Sour Lake	7	9,125	0	0	4	9	13
South Liberty	0	0	0	0	1	6	7
Vinton (La.)	7	630	3	0	2	9	11
W. Columbia	0	0	0	0	0	1	1
Misc.	11	0	9	2	14	54	68
Total Aug.	105	93,475	28	2	73	199	272
Total July	114	77,125	41	0	55	189	244
Difference	9	16,350	13	2	18	10	28

Decrease completions 9
Increase new production 16,350
Decrease dry holes 13
Increase rigs 18
Increase drilling wells 10
Net increase 28

WELLS COMPLETED
BOLING
Taylor, The Texas Company 8 ..... abd
Hawes, Humble-Gulf 5 ..... sw
Taylor, Sun Oil Co. 1 (wo) 50
Keller, Weed and Gayle 1 550
Hawes, Humble-Gulf 12 ..... abd

Wells completed 5
Production 600
Abandoned and salt water 3

BATSON
Milhome, Buchanan Oil 89 15
Choate, Gulf Prod. 62 70
Santa Fe, Houston Prod. 1 ..... sw

Wells completed 3
Production 85
Salt water 1

BARBER HILL
Barber, Mills Bennett Prod.-Humphrey Corp. 3 150
Barrow, Mills Bennett Prod.-Humphreys Corp. 5 250

Wells completed 2
Production 400

BLUE RIDGE
Blakely, Gulf Prod. 7-B ..... abd

Wells completed and abandoned 1
BIG CREEK
Davis, Gulf. Prod. 36 1200

Wells completed 1
Production 1200

EDGERLY
Bright-Penn, Gulf Ref. of La. 25 100
Hill, Drysdale-Savoy Oil 2 100

Wells completed 2
Production 200

GOOSE CREEK
Smith, Humble Oil & Ref. 68 ..... sw
Galliard, Gulf Coast Oil 9 25
Bryan, L. G. Marshall 3 150
Chapman-Bryan, Gulf Prod. 12 1500
Scorrgea, M. & B. Oil 4 ..... abd
Freeman, Southern Exploration 7 150
Smith, Humble Oil & Ref. 25 15

Wells completed 7
Production 1840
Abandoned and salt water 2

HUMBLE
Bailey, Hamm et al 3 25
River, Sun Oil Co. 33 200
Mason, A. L. Fondren 3 15

Wells completed 3
Production 240

HULL
F. Guedry, Humble Oil & Ref. 23 300
Lynd, Humble Oil & Ref. 1 ..... sw
Mecom, Mecom Oil 9 ..... abd
Dolbear, Republic Prod.-Houston Oil 133 700
Sterling, Humble Oil & Ref. 3 500
Dolbear, Republic Prod.-Houston Oil 122 300
Hannah fee, The Texas Company 1 400
Thomas, Gulf Prod. 10 350
Phoenix, Gulf Prod. 71 2500
Phoenix, Gulf Prod. 70 400
Thomas fee, Gulf Prod. 18 150
Barngrover, Empire Gas & Fuel 19 350

Wells completed 12
Production 5450
Salt water 1

HIGH ISLAND
Smith, Gulf Prod. 2 (wo) 500

Wells completed 1
Production 500

JENNINGS
Arndault, Gulf Refining 37 75
SFS, Port City Oil 6 500

Wells completed 2
Production 575

LOCKPORT
Miller, Vacuum-Gulf Cos. 7 250
Miller, Vacuum-Gulf 11 250

Wells completed 2
Production 500

MARKHAM
Kountz, Houston-Gulf Gas 1 ..... abd
Kountz, Rycade Pet. 2 150

Wells completed 2
Production 150
Abandoned 1

NASH
Wisdom, Rycade Pet. 8 1000

Wells completed 1
Production 1000

ORANGE
Winifree, Gulf Prod. 6 1500
McLean, Brownie Babbittee Oil 4 (wo) 100
Kishi-Lang, Gulf Prod. 11-A 800
Carbello, Rex Pet. 10 ..... sw
State land, Tillery Oil 2 200
Peveto, Gulf Prod. 6 (wo) 25
Hager, Gulf Prod. 4 300
McLean, Brownie Babbittee Oil 12 3500
Chesson, Texhoma Oil 6 (wo) 150
Winifree, Orange Pet. 6 (wo) 150
Winifree, Humble Oil & Ref. 4 (wo) 1600
Mecom, Peer Oil 1 ..... abd
McGuire, Kishi Dev. 6 ..... sw

Wells completed 13
Production 8335
Abandoned and salt water 3

PIERCE JUNCTION
Bender, Bashara Oil 1 2500
Settegast, Rio Bravo Oil 2-P. F. (wo) 50

Wells completed 2
Production 2550

PIEDRAS PINTAS
Walsh, Humble Oil & Ref. 6 250
Peters, J. K. Hughes Dev. 1 ..... abd
Halff, Grayburg Oil 1 ..... abd
Morgan, Moody Oil 1 ..... abd

Wells completed 4
Abandoned 3
Production 250

SPINDLETOP
Fee, Yount Lee Oil 2 2500
Gladys, Yount Lee Oil 6 7000
Fee, Yount Lee Oil 3 3000
McFaddin, Yount Lee Oil 8 10000
Fee Yount Lee Oil 5 3000
Jack-Duff, Gulf Prod. 1 5000
Mann, Gulf Prod. 3 6000
Oakwood, Gulf Prod. 1 3600
Weed, Gulf Prod. 3 4000
Roache, Gulf Prod. 2 6000
Quinn, Gulf Prod. 2 4000
McLean, Atlantic Oil Prod. 1 1600
T. & No. O Ry., Rio Bravo Oil 4 4000
McLean, Atlantic O. P. Co. 3 ..... dry
Gordon, Paggi Bros. 1 (dpnd.) 400
Ewing, Combest et al 1 200

Wells completed 16
Production 59800
Dry 1

SARATOGA
112-B, Rio Bravo Oil 25

Wells completed 1
Production 25

SOUR LAKE
Oxford-Kelly, Humphrey Corp. 1 2200
H. Gilbert, Yount Lee Oil 4 (wo) 1500
Bashara, Humphrey Corp. 2-A 1525
Bashara, Humphrey Corp. 1-B 2500
Merchants, Orange Pet. 1 1200
Hardin, Lake View Oil 49 100
Fee, The Texas Company 302 100

Wells completed 7
Production 5125

VINTON
Rescue, Vinton Pet. 21 500
Harmony, Vinton Pet. 15 ..... dry
Gray, Supreme Oil 2 ..... abd
Vincent, The Texas Company 3 25
G. N. G. Gulf Ref. 42 5
Gray, Marrs McLean 11 100
Vincent, Vinton Pet. 17 ..... sw

Wells completed 7
Production 620
Abandoned and salt water 2

MISCELLANEOUS
Harris County—
Foster, Kane Exploration 1 ..... abd
Brazoria County—
Clemens, Roxana Pet. 2 ..... abd
Bee County—
Scott, W. G. Clark 2 ..... abd
Fort Bend County—
Long Point, Davis, Gulf Prod. 12 ..... abd
Hartfield, Marland Oil 1 ..... abd
Jefferson County—
Big Hill, Westbury, Port Arthur Development 3 ..... sw
Liberty County—
Masterson, Sun Oil Co. 3 ..... abd
Schlendler, D. J. Harrison 2 ..... sw
Refugio County—
Holmes, Houston-Gulf Gas 1 ..... sw
Heard, Bartlett, Prod. 1 ..... gas
Jackson County—
Edra, Lee, Wright Bros. 1 ..... gas

Wells completed 11
Gas 2
Abandoned and salt water 9

WELLS DRILLING AND RIGS
BOLING
Rigs
Keller, Weed and Gayle 2.
Bank, Weed and Gayle 2.
Wells Drilling
Felder, The Texas Company 2.
Farmer, The Texas Company 1.
Farmer, Sun Oil Co. 2.
Rigs, 2; wells drilling, 3; total, 5.

BATSON
Rigs
Milhome, Buchanan Oil 91.
Texas, Ada Belle Oil 109.
Wells Drilling
Lajarza, The Texas Company 2.
Milhome, Buchanan Oil 90.
Cruse, Gulf Prod. 1.
Choate, Gulf Prod. 63.
Counselman, East Batson Oil 1.
Paraffine, Paraffine Oil 67.
Rigs, 2; wells drillings, 6; total, 8.

BLUE RIDGE
Rigs
Lascher, Gulf Prod. 9.
Robinson, Navarro Oil 1.
Wells Drilling
Blakely, Gulf Prod. 10-C.
West-Schenck, Gulf Prod. 6.
Rigs, 2; wells drilling, 2; total, 4.

BARBER HILL
Rigs
Myers, Humble Oil & Ref. 1.
Kirby, Mills Bennett Prod. 3.
Wells Drilling
Barber, Barclay & Meadors 2.
Fee, Mills Bennett 6.
Rigs, 2; wells drilling, 2; total, 4.

BIG CREEK
Wells Drilling
Davis, Gulf Prod. 32, 33.
Rigs, 0; wells drilling, 2; total, 2.

EDGERLY
Wells Drilling
Hunter, Rex Petroleum 3.
Lilliard, C. M. Crotty 14.
Rigs, 0; wells drilling, 2; total, 2.

GOOSE CREEK
Rigs
Peninsula, Humble Oil & Ref. 17, 31.
Wells Drilling
Smith, Humble Oil & Ref. 26, 69.
Peninsula, Humble Oil & Ref. 9, 10, 12.
Galliard, Gulf Coast Corp. 9 (wo).
Wright, Gulf Pro. 7.
Hirsch, Gulf Pro. 6.
Beaumont, Gulf Prod. 34.
State land, Gulf Prod. 10 (dpng).
Rigs, 2; wells drilling, 10; total, 12.

HUMBLE
Wells Drilling
River, Sun Oil Co. 34.
Mason, A. L. Fondren 4.
Bailey, Hamm & Co. 4.
Bailey, McDonough et al 2.
Hirsch, Czereaux and Martin 18.
Long, Marisiais Bros. 8.
Rigs, 0; wells drilling, 6; total, 6.

HULL
Rigs
Phoenix, Gulf Prod. 73, 74.
Lynd, Humble Oil & Ref. 2.
Baldwin, Humble Oil & Ref. 1.
Merchant, Humble Oil & Ref. 5.
Taylor, Houston Prod. 10.
Wells Drilling
Dolbear, Republic Prod.-Houston Oil 126, 136, 137, 138.
Guedry, Humble Oil & Ref. 22.
Hooks-Spell, Humble Oil & Ref. 4.
Lynd, Humble Oil & Ref. 1.
Harrison, Hull Oil 4.
Abel, Hull Oil 11.
Barngrover, Empire Gas & Fuel 20, 21.
Hannah fee, The Texas Company 1.
Armelin, The Texas Company 1.
Hannah fee, Gulf Prod. 18.
Scarborough, Gulf Prod. 18.
Rigs, 6; wells drilling, 15; total, 21.

HIGH ISLAND
Wells Drilling
Smith, Gulf Prod. 5.
Cade, Sun Oil Co. 8-C, 11.
Lockhart, Sun Oil Co. 9 sd.
Rigs, 0; wells drilling, 4; total 4.

JENNINGS
Wells Drilling
Arndault, Gulf Ref. 38.
Jennings-Clement, Jennings Oil 5.
SFS, Port City Oil 6.
Rigs, 0; wells drilling, 3; total, 3.

NASH
Rigs
Flessner, Rycade Pet. 4.
Nash, Humble Oil & Ref. 1.
Wells Drilling
Nash, Rycade Pet. 9, 10.
Wisdom, Rycade Pet. 9, 10.
Rigs, 2; wells drilling, 4; total, 6.

ORANGE
Rigs
Cow Bayou, Rycade Pet. 2.
Wells Drilling
McLean, Brownie Babbittee Oil 3.
Carbello, Rex Pet. 2-B.
Chesson, Humble Oil & Ref. 27-B.
Brown, Sun Oil Co. 2.
Cow Bayou, Rycade Pet. 1-C.
McGuire, Gulf Prod. 1 (dpng).
McGuire, Kishi Dev. 6 (dpng).
Rigs, 1; wells drilling, 7; total, 8.

ORCHARD
Wells Drilling
Moore, Gulf Prod. Co. 8.
Rigs, 0; wells drilling, 1; total, 1.

SPINDLETOP
Rigs
Weed, Gulf Prod. 6.
Oakwood, Gulf Prod. 5.
Jack-Duff, Gulf Prod. 2, 3, 4.
McLean, Sun Oil Co., 6, 7.
Price, Sun Oil Co. 1.
T. & N. O., Rio Bravo Oil 8, 9.
McLean, Atlantic O. P. 8, 9.
Gladys, W. B. Flynn 1.
Gladys, Mark Keeler 1.
McFaddin, Hyland Oil 1.
Fee, Yount Lee Oil 5, 6.
McFaddin, Yount Lee Oil 10.
Gladys, C. C. Rush 1.
Weed, F. E. Hammond 1.
Fee, Magnolia Pet. 1.
Wells Drilling
Fee, Yount Lee Oil 3, 4.
Gladys, Yount Lee Oil 8.
Trembly, Yount Lee Oil 2.
Weed, Gulf Prod. 4, 5.
Mann, Gulf Prod. 2 (dpng), 4.
Oakwood, Gulf Prod. 2, 3, 4.
Roche, Gulf Prod. 2 (dpng) 3, 4.
Scharbauer, Deutser Oil 1 (dpng).
Banks, Turnbow Oil 1.
Weed, Turnbow Oil 1.
McLean, Sun Oil Co. 3, 4.
T. & N. O., Rio Bravo Oil 6, 7.
Trembly, Seven Oil 2.
Gordon, Paggi & Co. 2, 3.
McFaddin, Unity Oil 89.
McLean, Atlantic Oil Prod. 3, 4 (dpng), 5, 6, 7.
McLean, Grayburg Oil 1.
Ewing, Hinds et al 1.
Davis, Lord & Mothner 1.
Trembly, Porch & Telshaw 5.
Hammond, Rush & Pittman 1.
Rush, Spindletop Gusher Oil 1.
Weed, Wilson & Broach 1.
Quinn, Walker Oil 3.
McFaddin, Ward & Wise 1.
Garrick, New Beaumont Oil 1 sd.
Rigs, 21; wells drilling, 40; total, 61.

PIERCE JUNCTION
Rigs
Settegast, Rio Bravo Oil 4, 5.
Dooley, Navarro Oil 1.
Jones fee, Gulf Prod. 1-A, 1.
Bender, J. F. Bashara 2, 3.
Fee, The Texas Company 1.
Wells Drilling
Settegast, Rio Bravo Oil 3-P.F.
Dooley, Texas Exploration 10.
Cain, Navarro Oil 3.
Taylor, Gulf Prod. 19.
Prudential, Marland Oil 1.
Rigs, 8; wells drilling, 5; total, 13.

PIEDRAS PINTAS
Wells Drilling
Beecher, Humble Oil & Ref. 1.
Speer, Magnolia Pet. 1.
Rigs, 0; wells drilling, 2; total, 2.

SARATOGA
Rigs
Brooker, E. W. Skinner Oil 1.
Wells Drilling
Jorditt, Rio Bravo Oil 11.
Queen City, Paggi & Co. 43, sd.
Rigs, 1; wells drilling, 2; total, 3.

SOUR LAKE
Rigs
Cora Jackson, Gulf Prod. 2, 3.
Hashara, Humphrey, Corp. 1-E.
Hardin, Lake View Oil 51.
Wells Drilling
Bashara, Humphrey Corp. 2-B, 3.
Libby, Sun Oil Co. 1.
Eunice, Eunice et al 1, 2.
McLean, Gulf Prod. 1-D.
Cora Jackson, Gulf Prod. 1.
Schaffers, Gordon et al 1.
Hardin, Humble Oil & Ref. 34 (dpng).
Rigs, 4; wells drilling, 9; total, 13.

SOUTH LIBERTY
Rigs
Welder, Humble Oil & Ref. 4.
Wells Drilling
Welder, Humble Oil & Ref. 3.
Beckman, Gulf Prod. 1.
Harrison, Peer Oil 1 (wo).
Condit, Sinclair Oil & Gas 1 (wo).
Mitchell, Premium Oil 1.
Mitchell, LeCour Oil 1 sd.
Rigs, 1; wells drilling, 6; total, 7.

LOCKPORT, LA.
Rigs
Bayou d'Inde, Vacuum-Gulf joint No. 2.
Wells Drilling
Miller, Vacuum-Gulf 8, 10.
Farquhar, Vacuum-Gulf 1.
Lock-Moore, Vacuum-Gulf 4.
Bordages, Vacuum-Gulf 3.
Bayou d'Inde, Vacuum-Gulf 1.
Rigs, 1; wells drilling, 6; total, 7.

VINTON
Rigs
Rescue, Vinton Pet. 27.
Vincent, The Texas Company 17.
Wells Drilling
Gray, Vinton Pet. 56.
Vincent, Edgerly Pet. 10, 11.
Gray, The Texas Company 2-C.
Vincent, Gulf Ref. 42.
Gray, Gulf Ref. 2-A.
Starr-Vincent, Gulf Ref. 40.
Perry, Ratcliff et al 1.
Rescue, Vinton Pet. 22.
Rigs, 2; wells drilling, 9; total, 11.

WEST COLUMBIA
Wells Drilling
Masterson, Hyde Prod. 2.
Rigs, 0; wells drilling, 1; total, 1.

N. LOUISIANA-ARKANSAS

LOUISIANA

Summary of Completions and Operations

Parish—	Comp.	Prod.	Dry	Gas	Rigs	Drg.	Ttl.
LaSalle	42	2,690	9	0	9	28	37
Caddo	25	1,814	3	3	11	38	49
Bossier	4	110	1	1	1	3	4
Caldwell	3	0	3	0	1	1	2
Claiborne	1	0	1	0	0	4	4
DeSoto	1	0	1	0	0	4	4
Grant	8	35	7	0	2	3	5
Jackson	0	0	0	0	1	4	5
Monroe Dist.	9	0	0	9	2	15	17
Natchitoches	1	0	1	0	2	4	6
Webster	4	29	2	2	1	8	9
Winn	8	1,100	6	0	2	3	5
Misc.	4	0	4	0	4	11	15
Total Aug.	110	5,778	38	15	36	126	162
Total July	105	6,602	21	13	51	120	171
Difference	5	176	7	2	15	6	9

ARKANSAS

Summary of Completions and Operations

County—	Comp.	Prod.	Dry	Gas	Rigs	Drg.	Ttl.
Union County	77	3,661	12	6	25	58	83
Ouachita	17	1,050	4	1	2	18	20
Columbia	2	12	1	0	0	1	1
Nevada	1	50	0	0	3	6	9

Lafayette	3	40	2	0	0	0	0
Miscellaneous	4	0	4	0	1	10	11
Total Aug.	104	4,843	23	7	31	93	124
Total July	93	4,017	22	3	39	118	157
Difference	11	826	1	4	8	25	33

LOUISIANA COMPLETIONS
LA SALLE PARISH

25-10-1e King, Abercrombie and Co. 2.. 500
26-10-1e Fee, Cox et al. 3..... 80
36-10-1e King, O. F. Whittaker 5 75
25-10-1e Tremont, Louisiana Oil Refining Corp B-34 75
25-10-1e Tremont, Louisiana Oil Refining Corp B-6. 40
18-10-2e Urania, Natural Gas and Fuel Corp H-1 30
18-10-2e Urania, Natural Gas and Fuel Corp. K-2 15
19-10-2e Urania, Natural Gas and Fuel Corp. M-1 35
24-10-1e Urania, Dixie Oil Co. 8 .... dry
7-10-2e Urania, Hunt McCurry and Zoder's 3 40
7-10-2e Urania, Beckman and Freeman B-2 50
11- 9-1e Baldridge, Southern Crude Oil Purchasing Co. 1 ..... dry
2- 9-1e Griswold, H. L. Hunt 1 100
23- 9-1e Taylor, Henry Jones 1 ..... dry
1-10-1e Urania, Spencer and Rhodes 2 dry
18-10-2e Urania, Natural Gas and Fuel Corp. K-7 40
36-10-1e Doughty, W. T. Murray 2 50
2- 9-1e Urania, George W. Wetherbee A-2 200
7-10-2e Urania, Beckman and Freeman B-3 200
26-10-1e Tullos Heirs, H. L. Hunt 15.. 150
19-10-2e Urania, Hope Oil Co. 2 25
25-10-1e Zimmerman, Love et al 6 75
22-11-3e Louisiana Central, Humble Oil and Refining Co. 2-A ..... dry
36-10-1e King, Explorers Oil Corp. 3.. abn
26-10-1e Herbert, Mitchell et al 1.... 50
26-10-1e Herbert, Mitchell et al 2.... 35
24-10-1e Urania, Natural Gas and Fuel Corp. F-4 25
19-10-2e Urania, Natural Gas and Fuel Corp. M-2 50
19-10-2e Urania, Hope Oil Co. 3 ... 200
7-10-2e Urania, Beckaman and Freeman B-4 25
25-10-1e Odom, Carlton and Thorpe 1 abn
26-10-1e Wright, Hamilton et al 2 50
18-10-2e Urania, Natural Gas and Fuel Corp. H-3 10
16-10-1e Urania, Ohio Oil Co. 8 15
35-10-1e Tremont, Louisiana Oil Refining Corp. C-1 30
25-10-1e Tremont, Louisiana Oil Refining Corp. B-14 125
36-10-1e Tannehill, Arizola Petroleum Co. 9 15
8-10-2e Urania, Yeary and Bristol 3.... 100
2- 9-1e Urania, George W. Weatherbee 4 150
2- 9-1e Tremont, Louisiana Oil Refining Corp. C-2 30
7-10-2e Collins, Keene and Woolf A-1 dry
25-10-1e Tremont, Louisiana Oil Refining Corp. B-12 ..... dry
25-10-1e Tremont, Louisiana Oil Refining Corp. B-10 ..... dry
1- 8-1e L. & A. Tunica Petroleum Co. 7 ..... dry

Completions 42
Production 2690
Dry 9

CADDO PARISH

16-20-16 Ferry Lake, Gulf Refining Co. 244 20
1-21-15 Ardis, Ohio Oil Co. 1 ..... dry
27-21-15 Watkins, Double I. I. Oil Co. 6 10
14-21-15 Robertshaw, Dixie Oil Co. 77 8
16-20-16 Ferry Lake, Gulf Refining Co. 242 15
15-21-15 Vespy, Lewis Oil Corp. 7 .. 17
28-21-15 Hobbs, Texas Company A-7.. 38
30-21-15 Hobbs, Texas Co. B-3 5
14-21-15 Herold, Texas Company 8.... 20
15-20-16 Bayou, Texas Company B-1.. dry
15-20-16 Ferry Lake, Gulf Refining Co. 246 100
7-20-15 Muslow, Dixie Oil Co. 15.... 35
34-21-16 State, W. D. Chew 4 100
14-21-16 Caddo L. B., Texas Company 63 ..... gas
31-21-15 Muslow Fee, Thomason et al 1 1000
24-22-15 Hess, Bayou State Oil Co. 28. 20
15-21-15 Spell, Double I. I. Oil Co. 7 5
15-21-16 Burglass, Galloway et al - .. gas
23-22-15 Allen, Standish Oil and Refining Co. 8 20
21-21-15 Hicks and Payne, Texas Company 4 ..... dry
26-21-15 C. M. L. Co., Texas Company 78 5
14-21-15 Robertshaw, Dixie Oil Co. 78 12
22-20-16 Ferry Lake, Gulf Refining Co. 245 80
9-20-16 Levee Board, Gulf Refining Co. U-6 6
7-17-16 Bryson, Owl Oil Co. 2 ..... gas

Completions 25
Production 1814
Dry 3
Gas 3

BOSSIER PARISH

14-23-12 L. & A., Woodley and Collins 1 ..... dry
20-16-11 Elliston, Palmer Corp. 2 .... gas
15-19-11 Fee, Louisiana Oil Refining Corp. D-31 10
15-19-11 Bliss and Wetherbee, Gulf Refining Co. A-20 100

Completions 4
Production 110
Dry 1
Gas 1

DE SOTO PARISH

29-15-14 Williamson, Carl K. Dresser 1 dry
CALDWELL PARISH
1-13-5e Caldwell Lumber Co., Southern C. O. P. Co. 2 ..... dry
35-14-5e Caldwell Lumber Co., Southern C. O. P. Co ..... dry
6-12-4e Lively, Chal Daniels 1 ..... dry
CLAIBORNE PARISH
7-22- 5 Meadows, Triangle Drilling Co. 1 ..... dry

GRANT PARISH

15- 9-2w L. & A., Humble Oil and Refining Co. A-8 ..... dry
37- 7-1w Ball, Finn and Hurdley 1.... dry
32- 9-1e L. & A., Tunica Petroleum Co.
26- 8-5w Barnes, Fuller et al 1..... dry
2 ..... dry
27- 9-1w L. & A., Humbzie Oil and Refining Co. A-9 ..... dry
17- 9-1e Swope, Gulf Refining Co. 1.. 35
16- 8-1e L. & A., Tunica Petroleum Co. 5 ..... dry
9- 8-5w Harrison, Fuller et al 1 ... dry

Completions 8
Production 35
Dry 7

NATCHITOCHES PARISH

3-13- 7 Ayers, Forrest trustee 1 ..... dry
MONROE DISTRICT
24-21-4e Crossett, Natural Gas Products Co. 19 ..... gas
28-21-4e Grayling, Southern Carbon Co. 4 ..... gas
17-19-4e Fee, Hatcher and Evans 4 gas
24-20-4e Burton, United Carbon Co. 1.. gas
20-19-4e McErwin, Maury Drilling Co. 3 ..... gas
1-10-4e Central, Palmer Corp. 1 ..... gas
35-1904e Fee, Southern Carbon Co. 49.. gas
21-21-4e Grayling, Southern Carbon Co. 5 ..... gas
12- 9- 4 Kerr, Central Co. 1 ..... gas

Completions 9
Gas wells 9
Production 102,000,000

WINN PARISH

24-13-1e Louisiana Central, C. H. Wilson 1 ..... dry
27-10-1e Sanders, Standard Oil Co. 1.. dry
8- 9-3w Edenborn, Hunt et al 1 ..... dry
21-10-2w L. & A., Humble Oil and Refining Co. 12 ..... dry
26-10-1e Harper, O. W. Clark 5 1000
27-10-1e Albritton, O'Neill and Schuman 1 ..... dry
4-12-1w Edenborn, Ohio Oil Co. 1 .... dry
26-10-1e Tisdale, Keene and Woolf 2 100

Completions 8
Production 1100
Dry 6

WEBSTER PARISH

16-21-10 Sidney Heirs, Ohio Oil Co. 7 7
23-21-10 Holloway, Ohio Oil Co. 3 .. gas
21-21-10 Tiner, Magnolia Petroleum Co. 2 22
32-23- 9 Sexton, Magnolia Petroleum Co. 1 ..... gas

Completions 4
Production 29
Gas 2
Production 10,000,000

SCATTERED WILDCATS

8-10-9e Montgomery, Magnolia Petroleum Co. 1 ..... dry
24-12-11 Hollingworth, Carnahan and Kyle 2 ..... dry
19- 4-11 Drake, Toro Petroleum Co. 3.. dry
3-20-4w Cooper, Arkansas Fuel Oil Co. 1 ..... dry

Completions 4
Dry 4

RIGS AND WELLS DRILLING
LA SALLE PARISH
Wells Drilling

7-10-2e Urania, Beckman and Freeman, B-5, B-6, B-7.
24-10-1e Tullos, O. W. Clark, 5.
26-10-1e Smith, Finn and House 2.
25-11-3e Louisiana Central, Humble Oil and Refining Co. 3.
6-10-2e Urania, N. C. Hudson 1.
2- 9-1e Griswold, H. L. Hunt 2, 3.
3- 9-1e Griswold, Keene and Woolf 2.
35-10-1e Tremont, Louisiana Oil Refining Corp A-10.
30-10-2e Tremont, Louisiana Oil and Refining Corp B-21.
2- 9-1e Tremont, Louisiana Oil Refining Corp. C-3.
26-10-1e Rateliffe, Little River Oil Co. 1.
11- 9-1e Zenoria, Montague Oil Co. 3.
5-10-2e Urania, McGaha et al 1.
26-10-1e Russell, Natural Gas and Fuel Corp. A-3, A-4.
20-10-2e Urania, Natural Gas and Fuel Corp. M-3, M-4.
30-10-2e Tremont, Rochelle Oil Co. 1.
26-10-1e Pendarvis, Shreveport Oil Corp. 1.
18-10-2e Winberry, Sterling Co. 2.
18-10-2e Urania, C. S. Thomas 1.
15- 9-3e L. & A., Tunica Petroleum Co. 4.
2- 9-1e Urania, George W. Wetherbee 3.
36-10-1e King, Wooten et al 1.
2-10-2e Urania, Yeary and Bristol 4.

Rigs

7-10-2e Urania, Beckaman and Freeman B-8.
3- 9-1e Urania, Carter and Hurley C-1.
2- 9-1e Griswold, H. L. Hunt 4.
2- 9-1e Urania, H. L. Hunt 2.
3- 9-1e Griswold, Keene and Woolf 1.
25-10-1e Tremont, Louisiana Oil Refining Corp. B-35.
3- 9-1e Tremont, Louisiana Oil Refining Corp C-6.
2- 9-1e Urania, George W. Wetherbee 5.
3- 9-1e Urania, Wetherbee et al B-1.

Shut Down

23-10-1e State, Beckaman and Freeman 1.
33-10-1e Louisiana Central, Cherokee Petroleum Co. 3.
2- 9-1e Urania, Chal Daniels 1.
23- 8-1e White Sulphur, Jena Oil Corp. 1.
23- 9-1e Taylor, Henry Jones 2.
7-10-2e Kinney, T. G. Randle trustee 1.

BOSSIER PARISH
Wells Drilling

9-22-11 Bollinger, Doern et al 1.
4-21-11 Antria, Woodley and Collins 1.
15-19-11 Fee, Wetherbee A-13.

Rigs

26-20-13 Jacobs, Tubbs et al 1.

Shut Down

15-19-11 Connell, Autrey Oil Co. 4, 5.
9-20-13 Bulkley, Benton Syndicate 1.
15-19-11 Fee, George Wetherbee A-14.

CADDO PARISH
Wells Drilling

34-21-16 State, W. D. Chew 5.
9-20-16 Caddo L. B., W. D. Chew A-1.
15-21-15 Spell, Double I. I. Oil Co. 8.
27-22-15 Jolly, Dixie Oil Co. 1.
7-20-15 Muslow, Dixie Oil Co. 17.
27-21-14 Sellington, Gilliam Syndicate 1.
2-19-14 Byrd, Gulf Refining Co. 1.
15-20-16 Ferry Lake, Gulf Refining Co. 247, 248, 151.
16-20-16 Ferry Lake, Gulf Refining Co. 249.
28-21-16 Ferry Lake, Gulf Refining Co. 250.
16-20-16 Levee Board, Gulf Refining Co. U-7.
25-21-15 Muslow, Gulf Refining Co. E-1.
24-21-15 Dillon, Magnolia Petroleum Co. 16, 17.
23-21-15 Robertshaw, Magnolia Petroleum Co. 10.
29-21-15 Spell, Magnolia Petroleum Co. 1.
24-21-15 Bradford, Magnolia Petroleum Co. 1.
1-20-16 Palo Oil Co., Morris Drilling Co. 1.
12-21-15 Smith, Ohio Oil Co. 20.
9-17-16 Bryson, Owl Oil Co. 2.
32-21-15 Muslow Oil Co., Ramsey et al 1.
26-20-15 Youree, Superior Oil Co. 4, 5.
33-21-16 Caddo L. B., Texas Company 64.
22-15-12 Caddo L. B., Texas Company B-1.
23-21-15 C. M. L., Texas Company 40, 42.
4-20-16 Harrell, Texas Company 64.
3-20-16 Perry, Texas Company 3.
3-20-16 Russell, Texas Company 12.
23-21-15 Bashara, Tholl Oil Co. 11.
13-21-16 Crystal, Unity Petroleum Co. 1.
24-21-16 Crystal, Unity Petroleum Co. 2.
15-20-15 Thomas, Victor Wenzell 1.
14-20-15 Wemple, Victor Wenzell 1.

Rigs

2-20-16 Dambley, H. P. Burford 1.
15-20-16 Ferry Lake, Gulf Refining Co. 252.
22-20-16 Ferry Lake, Gulf Refining Co. 253, 254, 255.
20-20-16 Ferry Lake, Gulf Refining Co. 257.
18-17-16 Waterman, Magnolia Petroleum Co. 1.
12-21-16 Smith, Ohio Oil Co. 21.
31-21-15 La. Oil Co., Radio Oil Corp. 3.
3-21-16 Caddo L. B., Texas Company 64.
31-21-16 Muslow, Thomason et al 2.

Shut Down

15-17-14 Cunningham, Manie Drilling Co. 1.
28-21-15 Hobbs, Page and Caldwell 1.
3-15-15 Williams, Ridge Oil Corp. 1.

CALDWELL PARISH
Wells Drilling

38-13-4e Merideth, Keisker and Simon 1.

Rigs

22-14-4e Shaw, Kinsey and Jones 1.

Shut Down

10-11-2e Louisiana Central, Cherokee Petroleum Co. 1.
6-11-4e Cruse, Grant and Pipis 1.
10-11-4e Beasley, T. R. Robbins 1.
16-11-2e Love, Wright et al 1.

CLAIBORNE PARISH
Wells Drilling

14-23- 8 Taylor, Gilliland Oil Co., and Ramsey D-1.
35-16- 8 Crichton, Gulf Refining Co. 1.
20-21- 8 King, Shaw and Ruch 1.
7-19- 5 Keen, Triangle Drilling Co. 1.

DE SOTO PARISH
Wells Drilling

9-12-11 Jenking, Dixie Oil Co. 1.
27-12-11 Bond, Magnolia Petroleum Co. 1.
23-12-13 Woolums, Peer Oil Corp. 1.
27-11-11 Flores, Snapp et al 1.
No rigs, no shut downs.

GRANT PARISH
Wells Drilling

30- 9-2w Edenborn, Humble Oil and Refining Co. A-1.
17- 9-1e Holmes, Holmes et al 1.
17- 9-1e Holmes et al 1.
16- 9-1e Swope, Texas Company 1.

Rigs

17- 9-1e Swope, Gulf Refining Co. 2.
15- 9-1e Matthews, H. L. Hunt 1.

Shut Down

16- 9-1e Holmes, Bradley and Cozart 1.
4- 7-4w Calhoun, J. J. Long et al 1.

JACKSON PARISH
Wells Drilling

5-15-1e Martin, Charles A. Ferguson 1.
3-14-4w Jones, El Dorado Chief Oil Co. 1.
22-17-4w Adams, Grigsby and Co. 1.
20-16-3w Davis Theus, Louisiana Petroleum Co. 1.

Rigs

13-16-2e Davis Lumber Co., Raymond et al 1.
34-15-3w Horton, Clarence Houseman 1.

Shut Down

MONROE DISTRICT
Wells Drilling

22-20-4e Archer, Feazel trustee 1.
2-21-4e Tensas Delta, Natural Gas Products Co. 7.
34-21-3e Cooperage, Standard Oil Co. 1.
26-20-5e Clarke, United Carbon Co. 1.
17-17-5e West Virginia, Gulf Refining Co. 1.
6-19-5e Fee, Ladell et al 34.
35- 9-4e Ray and Gree, R. J. O'Brien 2
25-19-2e D'Arbone, Ouachita Natural Gas Co 2
13-19-4e Cole, Palmer Corp. 3.
18-19-5e Lynch, Palmer Corp. 1.
10-20-4e Patton, United Carbon Co. 1.
14-20-1e Reeves, Arkansas Fuel Oil Co. 1.
22-22-2w Pickens, R. W. Rhodes 1.
30-20-4e Mayfield, Ruston Drilling Co. 1.
37-20-4e Smith, Ouachita Gas Co. 6

Rigs

2-19-4e Ladell, Southern Carbon Co. 4.
8-23-1e Frost-Johnson, Clark Creek Oil Co. 2.

Shut Down

18-23.1e Frost-Johnson, Clark Creek Oil Co. 1.

NATCHITOCHES PARISH
Wells Drilling

78- 7-5w Cockfield, Brothers et al 1.
6- 5-7w L. L. L. L. Co., J. B. Greer 1.
26- 8-8w L. L. L. L. Co., Ohio Oil Co. 1.
4- 1-7 Fee, Weaver Brothers 1.

Rigs

21- 7- 9 L. L. L. L. Co., J. Davidson et al 1.
41-10- 7 Russell, McCormick et al 1.

Shut Down

3-13- 7 Ayers, Edwin J. Forrest, trustee 2.
4-11- 6 Edenborn, J. F. Palmer 1.

WEBSTER PARISH
Wells Drilling

30-23- 9 Pickett, Belchic and Laskey 1.
22-21-10 Cox, Humble Oil and Refining Co. 2.
21-21-10 Tiner, Magnolia Petroleum Co. 3.
27-21-10 Josey and Massey, R. W. Norton 1.
23-21-10 Cox, Ohio Oil Co. 1.
30-20- 8 Crichton, Palmer Corp. 1.
29-23-11 Oakley, Smitherman and McDonald 1.
1-22-10 Munn, Southern Crude Oil Purchasing Co., and Ramsey 1.

Rigs

21-21-10 Turner, Magnolia Petroleum Co. A-3.
No shut downs.

WINN PARISH
Wells Drilling

23-10-1e Allen, Allen et al 1.
26-10-1e Harper, O. W. Clark, 7.
4-12-1w Edenborn, Ohio Oil Co. 2.

Rigs

21-13-2w Sanders, Allen Drilling Co. 1.
26- 9-3w C. Edenborn, Humble Oil and Refining Co. 1-A.

Shut Down

6-10-2w Sullivan, Cedar Creek Petroleum Co. 1.
13-11-1e Urania, Cherokee Petroleum Co. 1.
6-10-2w Eagles, J. H. Hall 1.

SCATTERED WILDCATS
Wells Drilling

23-16-10 Thomas, Woodley and Collins 1.
3-18-3w Lincoln Land Co., Arkansas Fuel Oil Co. 1.
12-20-3w Davis, Buckley and Palmer 1.
12- 4-1e Voda, F. Pacholik 1.
11- 4-2w Ball, Seip et al 1.
13-11-10 Powell, Alden Drilling Co. 1.
23-18-8e Ches-Wyman, Gulf Refining Co. 1
9- 7-12 Bowman, L. M. Emlet 5.
14- 7-14 Bowman, L. M. Emlet 7.
11- 6- 11 L. L. L. L. Co., Magnolia Petroleum Co. 1.
29-14-12 Somerset, Spencer and Rhodes 1.

Rigs

24-19-12e Abston et al, T. A. Snell 1.
22-17- 6e Hicks, Louisiana Petroleum Co. 1.

Shut Down

51-16-14e Yerger, Bannon et al 1.
7- 5- 3w Wettermark, Minnesota Oil Corp. 1.

ARKANSAS
WELLS COMPLETED
UNION COUNTY

16-17-16 Goodwin, Atlantic Oil Producing Co. 7 70
4-17-16 Murphy, H. L. Hunt 6 61
3-17-16 Slaughter, Wingfield et al B-2 35
17-17-16 Mitchell, Lion Oil and Refining Co. A-5. 40
16-16-15 S. Cook, Simms Oil Co. 4 gas
9-16-15 Murphy, Gulf Refining Co. 21.. 20
15-16-15 Wells, Southern Oil Co. A-4.. 60
28-16-16 Swilley, H. L. Hunt 4 140
6-18-14 Alphin, Grimes and Jones 1 gas
16-17-16 Goodwin, Humble Oil and Refining Co. 7 100
16-17-16 Goodwin, Atlantic Oil Producing Co. 3 40
16-17-16 Goodwin, Rovenger Oil Corp. 8 30
3-17-16 Ford, Atlantic Oil Producing Co. 2 40
3-17-16 Slaughter, Southern Oil Co. 5 20
17-17-16 Mitchell, Lion Oil and Refining Co. A-18 25
17-17-16 Mitchell, Lion Oil and Refining Co. A-19 35
17-17-16 Mitchell, Lion Oil and Refining Co B-1 55
17-17-16 Mitchell, Lion Oil and Refining Co. C-2. 20
17-17-16 Slaughter, Magnolia Petroleum Co. 1 10
21-17-16 Primm, Gulf Refining Co. 2.. 40
26-17-16 Halsey, Magnolia Petroleum Co. 1 35
21-17-16 Goodwin, Ohio Oil Co. 7 25
21-17-16 Goodwin, Reynolds and Marr 3 20
27-19-14 Union Saw Mill, Jones and Murphy 1 ..... dry
4-16-15 Hardy-Murphy, Gulf Refining Co. 29 ..... ink
5-16-15 Hardy-Murphy, Gulf Refining Co, 38 135
7-16-15 Lawton, Humble Oil and Refining Co. B-2 ..... dry
3-16-15 Williams, Kennebrew et al 7 45
7-16-15 Tatum, Magna Production Co. 50
11-16-15 Ballard, Gulf Oil Co. 2 .... gas
9-16-15 Murphy, Lion Oil and Refining Co. H-1 ..... gas
10-16-15 Lawton, Sunny Jim Oil Co.... 70
9-16-16 Hall, Skelly Oil Co. 2 .... dry
3-16-15 Graves, Hickman et al 7 720
6-16-16 Werner, Gulf Refining Co. 46.. 20
10-16-15 Ballard, Federal Petroleum Co. 7 ..... dry
17-16-15 Murphy, E. M. Jones 8 .... wtr
8-16-16 Rumph, Southern Oil Co. 1 50
9-16-15 Murphy, Stewart et al 5 200
15-16-15 Murphy, Sure Oil Co. 5.... 75
21-17-16 Parker, Gulf Refining Co. 1 12
21-17-16 Primm, Gulf Refining Co. 3 51
22-17-16 Mooty, Eason et al 2 15
15-17-16 Mooty, Foster and McWilliams 3 20
21-17-16 Cruse, Humble Oil and Refining Co. 1 45
17-17-16 Mitchell, Lion Oil and Refining Co. A-4 20
4-17-16 Harrell, Magnolia Petroleum Co. 7 40
21-17-16 Goodwin, Ohio Oil Co. 8 25
3-17-16 Slaughter, Wingfield et al B-3 35
5-19-14 Loutre, Jones and Murphy 1.. dry
10-17-17 Gallagher, Wingfield et al 1 .. dry
3-17-16 Ford, Atlantic Oil Producing Co. 3 20
16-17-16 Goodwin, Atlantic Oil Producing Co. 6 60
21-17-16 Parker, Gulf Refining Co. 2.. 55
4-17-16 Murphy, H. L. Hunt 7 60
17-17-16 Mitchell, Lion Oil and Refining Co. A-7 15
17-17-16 Mitchell, Lion Oil and Refining Co. B-2 5
3-17-16 Willett, Roxana Petroleum Co. 7 76
8-16-16 Childs, Magnolia Petroleum Co. 2 30
21-16-16 Epps, Marine Oil Co. 1 .... dry
17-16-15 Vestal, Murdock et al 7 .... gas
15-16-15 Wells, Southern Oil Co. B-4 .. 70
4-16-16 Saxon, Texas Company 4 35
23-18-17 Taylor, Natural Gas Corp. and Atlantic 1 ..... dry
34-19-11 Townes, Arkansas Drilling Co. 1 ..... dry
9-16-15 Murphy, Gulf Refining Co. 22 200
15-16-15 Murphy, Standard Oil Co. 4 210
23-17-16 Ennis, Hatfield et al 3 ..... dry
1-16-17 Werner Co., Magnolia Petroleum Co. 2 45
20-17-16 Goodwin, Humble Oil and Refining Co. 1 17
17-17-16 Mitchell, Lion Oil and Refining Co., A-6 ..... gas

17-17-16 Mitchell, Lion Oil and Refining Co. A-6 ..... gas
17-17-16 Mitchell, Lion Oil and Refining Co. A-11. 15
17-17-16 Mitchell, Lion Oil and Refining Co. B-5 30
15-17-16 Dumas, J. D. Reynolds 5 15
8-17-16 Dumas, Reynols Oil Corp. 7.. 30
22-17-16 Snyder, Roxana Petroleum Corp. 1 4

Completions 77
Production 3661
Dry 12
Gas 6
Production 91,000,000

OUACHITA COUNTY

36-13-18 Ratch and Cartier, J. D. Reynolds 2 ..... dry
22-1-17 Yearbrough, Vandiver et al 1 dry
35-15-17 Clawson, A. Meek, trustee, 1. 20
33-15-15 Umsted, Gulf Refining Co. A-19 175
28-15-15 Berg, Roxana Petroleum Corp. 6 70
36-15-17 Shirey, Smith Drilling Co. 3 15
31-15-18 Watson, Magnolia Petroleum Co. 4 5
32-15-15 Berry, Texas Company 17.... 350
27-15-16 Hardin, Sun Oil Co. 3 74
20-15-15 Murphy, Standard Oil Co. 10 120
32-15-15 Rhoten, Magna Production Co. B-4 60
30-15-19 Jones, Louisiana Oil and Refining Corp. 2 26
29-15-15 Murphy, Simms Oil Co. 6.... dry
22-15-19 Culp, Louisiana Oil Refining Corp. 1 ..... gas
5-16-15 Hinton, Houston Oil Co. 2.... 125
6-16-15 McClanahan, Imperial Oil and Gas Co. 10 40
15-14-18 Howell, J. D. Reynolds 1..... dry

Completions 17
Production 1080
Dry 4
Gas 1
Production 20,000,000

COLUMBIA COUNTY

13-15-20 Brown, R. W. Aarnes 2 ..... dry
1-16-20 Jones, Gorden et al 5 12

Completions 2
Production 12
Dry 1

NEVADA COUNTY

10-14-21 Womack, Autrey Oil Co. 6 50

LAFAYETTE COUNTY

10-19-24 Red River, Gulf Refining Co. E-1 ..... dry
18-19-24 Allen, Arkansas Fuel Oil Co. 4. 40
14-17-24 Colvin, Texas Company 1 .... dry

Completions 3
Production 40
Dry 2

SCATTERED WILDCATS

21-16-12 Brown, Easley et al ..... dry
1-16-14 Calion Lumber Co., Southern Oil Co. 1 ..... dry
26-16-13 Freeman, Harris and Buckley 1 ..... dry
29-10-16 Owens, McNeil et al 1 ..... dry

Completions 4
Dry 4

WELLS DRILLING
UNION COUNTY

1-17-16 Murphy, Ackerly Drilling Co. 1.
8-18-12 Graner, Bonderant et al 1.
1-16-16 McDonald, F. A. Book 1.
31-15-16 Stout, Dyer Bros. 4-A.
32-17-16 Mooty, Eason et al 3.
16-16-15 Copk, Gladys Belle Oil Co. 5-A.
3-18-15 Hardy-Murphy, Gulf Refining Co. 39, 40.
4-16-15 Hardy-Murphy, Gulf Refining Co. 41.
21-17-16 Parker, Gulf Refining Co. 3, 4.
20-17-15 Patterson, Gulf Refining Co. 1.
21-17-16 Primm, Gulf Refining Co. 4.
6-16-16 Werner, Gulf Refining Co. 47.
23-17-16 Flenniken, H. M. Harrell 7.
8-18-15 Fitzgerald, F. C. Henderson 2.
18-16-15 Smith, F. C. Henderson 3.
8-18-15 Pratt, F. C. Henderson 2.
11-16-15 Giller, Hollayfield and McFarlane 10.
10-16-15 Giller, Hollayfield and McFarlane 13.
10-16-15 Pate, Humble Oil and Refining Co. 5.
27-16-16 Hammond, H. L. Hunt 1.
4-17-16 Murphy, H. L. Hunt 8.
26-17-16 Goodwin, Imperial Oil and Gas Co. 1.
21-17-16 Parker, Imperial Oil and Gas Co. 1.
3-16-15 Graves, Lion Oil and Refining Co. 10.
17-17-16 Mitchell, Lion Oil and Refining Co. A-1. A-10. A-16.
8-16-16 Childs, Magnolia Petroleum Co. 3.
20-17-16 Halsey, Magnolia Petroleum Co. 2. 3.
28-16-16 Murphy, Magnolia Petroleum Co. 1.
12-16-17 Scott, Magnolia Petroleum Co. 2.
8.17-16 Slaughter, Magnolia Petroleum Co. 2.
14-19-12 Lewis, Matthews et al 1.
10-16-15 Lawton, Mazda Oil Corp. R-6.
15-17-16 Milner, J. L. Meek, 1.
10-16-15 Pate, Ohio Oil Co. 11.
21-17-16 Stocks, Ohio Oil Co. 2.
17-16-15 Cook, Peer Oil Corp. 7.
10-16-15 Lawton, A. H. Ramage C-6.
15-16-15 Murphy, Sam Richardson M-2.
9-17-16 Dumas, Rovenger Oil Corp. 8.
16-17-16 Graham, Rovenger Oil Corp. 4.
9-18-13 Simmons, Simms Oil Co. and Sun Oil Co. 1.
3-16-15 Graves, Southern Crude Oil Purchasing Co. 10.
3-17-16 Tooker, Southern Crude Oil Purchasing Co. 1.
6-16-15 McClanahan, Standard Oil Co. 11.
6-18-15 Reynolds, Standard Oil Co. 4.
4-18-16 Walt, A. H. Stoltz 1.
8-18-15 Brown, Sun Oil Co. 9.
9-16-15 Flenniken, Sunny Jim Oil Co. 3.
4-16-15 Hays, Texas Company 8.
6-19-13 Cordell, Walber et al 2.
22-17-13 McGough, Wingfield et al 1.
3-17-16 Slaughter, Wingfield et al B-4.

Rigs

1-16-17 LaGrone, Arkansas Fuel Oil Co. 8.
3-17-16 Ford, Atlantic Oil Producing Co. 4.
13-18-15 Hollis, Belmont et al 1.
16-16-15 Cook, J. E. Crosbie 2.
7-16-16 Howard, Ferguson Drilling Co. 2.
20-17-16 Goodwin, Humble Oil and Refining Co. 2.
27-16-16 Swilley, H. L. Hunts 5.
21-17-16 Primm, Imperial Oil and Gas Co. 4.
10-16-15 Lawton, E. M. Jones 2-A.
17-17-16 Mitchell, Lion Oil and Refining Co. A-13, A-17.
20-17-16 Halsey, Magnolia Petroleum Co. 4. 5.
17-17-16 Slaughter, Magnolia Petroleum Co. 2.
15-17-16 Milner, J. L. Meek 2.
21-17-16 Stocks, Ohio Oil Co. 1.
22-17-16 Mooty, Reynolds and Marr 2.
9-17-16 Dumas, Rovenger Oil Corp. 3.
22-17-16 Dumas, Rovenger Oil Corp. B-1.
16-17-16 Goodwin, Rovenger Oil Corp. B-4.
15-17-16 Harrell, Rovenger Oil Corp. 4.
7-17-16 Willett, Roxana Petroleum Co. 3.
34-16-16 Murphy, Simms Oil Co. 1.
15-16-15 Wells, Southern Crude Oil Purchasing Co. A-5.
4-16-15 Calloway, Texas Company 8.

Shut Down

9-18-17 Primm, Calgo Oil Co. 1.
34-16-16 Mathews, W. H. Harper, trustee, 1.
10-16-15 Lawton, Mazda Oil Co. R-4, R-6.

OUACHITA COUNTY
Wells Drilling

13-15-17 Berg, Copenhaven, W. H. 2.
33-15-15 Umsted, Gulf Refining Co. A-20. A-21.
28-15-15 Hildebrant, Humble Oil and Refining Co. 10.
27-15-16 Neeley, W. R. Keever 2.
35-15-17 Clawson, A. Meek 2.
31-15-15 Laney, Phillips Petroleum Co. 3.
9-14-17 Tate, Phillips Petroleum Co. 1.
2-14-18 Ratch and Cartier, J. D. Reynolds 3.
28-15-15 Berg, Roxana Petroleum Corp. 7.
32-15-15 Bennett, Standard Oil Co. B-8.
28-15-15 Murphy, Standard Oil Co. B-11.
22-15-16 Hardin, Sun Oil Co. 2.
34-15-15 Snyder, Sure Oil Co. 4.
27-15-16 Neeley, Texas Company 8.
29-15-15 Richardson, Woodley Petroleum Co. 5.
31-15-19 Watson, Magnolia Petroleum Co. 5.
32-15-19 Curry, Ohio Oil Co. 1.

Rigs

21-14-17 Reynolds, A. T. Grayson 1.
33-15-15 Umsted, Gulf Refining Co. A-22.

Shut Down

22-15-19 Davis, Arco Oil Co. 1.
15-15-19 Holton, Louisiana Oil Refining Corp. 1.

COLUMBIA COUNTY
Wells Drilling

1-16-20 Jones, Gorden et al 6, 7.

Shut Down

29-19-20 Peter Doss, Kentucky Arkansas Petroleum Co. 1.
6-18-20 Davis, Scott Phillips 2.

NEVADA COUNTY
Wells Drilling

9-14-21 McKinney, Autrey Oil Co. 1.
2-14-21 Ellis, Bemis et al 1.
2-14-21 Groves, W. F. Furen et al 1.
10-14-21 Bodcau, Humble Oil and Refining Co. 4.
2-14-21 Ellis, Humble Oil and Refining Co. A-3.
12-14-21 Moss, Zing et al 1.

Rigs

11-14-21 Wallace, Autrey Oil Co. 1.
2-14-21 Waters, Humble Oil and Refining Co. 1.
2-14-21 Waters, Southern Crude Oil Purchasing Co. 1.

SCATTERED WILDCATS
Wells Drilling

33-15-11 Arkansas Timber Co., Magnolia Petroleum Co. 1.
7-15-11 Southern Lumber Co., McMurray et al 1.
2-16-12 Southern Lumber Co., Wingfield et al 1.
16-11-12 Guidor, Delmar Oil Co. 1.
15-13- 5 Olga, McClintock and Goodka 1.
17-11-25w Nichols, Frank S. Myers 2.
1-13-21 Waldrop, Greason et al 1.
10-11-21 Hawkins, Mellick Oil Co. 1.
27-17-16 Dorsey, Gulf Refining Co. 1.
26-14-27 Priest, W. D. Nash et al 1.

Rigs

20-15- 7 Bledsoe, Rhodes and Kirker 1.

Shut Down

7-17- 5 Fee, Pine Prairie Oil Co. 1.
31-10-10 Hall, Kingland Oil Co. 1.
7- 3-10 Hinsley, Decem Oil Co. 1.
2-12-31 Allen, Grote et al 1.

ROCKY MOUNTAIN AREA

WYOMING

Summary of Field Operations

Dist.—	Comp.	Prod.	Dry	Gas	Rigs	Drg.	Ttl.
Big Muddy	0	0	0	0	4	4	
Salt Creek	41	5,273	0	0	18	127	145
Lance Creek	0	0	0	0	0	3	3
Big Horn Basin	1	0	1	0	2	56	58
Lost Soldier & Carbon Co.	2	0	1	1	3	27	30
Rock Riv. Dist.	0	0	0	0	0	13	13
Fremont Co.	1	0	1	0	1	30	31
Osage	0	0	0	0	3	4	7
Natrona Co.	1	0	1	0	1	10	11
Lincoln & Uintah Counties	1	15	0	0	4	30	34
Baxter Basin	0	0	0	0	0	8	8
Misc.	0	0	0	0	2	16	18
Total Aug.	47	5,288	4	1	34	328	362
Total July	56	4,063	8	3	41	358	399
Difference	9	1,225	4	2	7	30	37

MONTANA

Summary of Field Operations

Dist.—	Comp.	Prod.	Dry	Gas	Rigs	Drg.	Ttl.
Sunburst	46	5,779	11	2	9	65	74
Cat Creek and Misc.	2	0	1	1	6	78	84
Total Aug.	48	5,779	12	3	15	143	158
Total July	54	9,507	19	6	12	128	140
Difference	6	3,728	7	3	3	15	18

COLORADO

Summary of Field Operations

Dist.—	Comp.	Prod.	Dry	Gas	Rigs	Drg.	Ttl.
Total Aug.	7	320	2	1	19	100	119
Total July	12	3,749	4	1	16	97	113
Difference	5	3,429	2	0	3	3	6

UTAH

Summary of Field Operations

Dist.—	Comp.	Prod.	Dry	Gas	Rigs	Drg.	Ttl.
Total Aug.	0	0	0	0	3	31	34
Total July	0	0	0	0	2	31	32
Difference	0	0	0	0	1	0	1

NEW MEXICO

Summary of Field Operations

Dist.—	Comp.	Prod.	Dry	Gas	Rigs	Drg.	Ttl.
Total August	15	300	4	0	8	146	154
Total July	13	1,790	1	0	8	151	159
Difference	2	490	1	0	0	5	5

WYOMING

Wells Completed

23-40-79 SE, Wyoming Oil Fields 24-I. 400
24-40-79 SW, Wyoming Oil Fields 31-A 25
14-40-79 NW, Wyoming Asso. 22-A .. 30
35-40-79 SE, Wyoming Asso. 25-A.. 35
1-39-79 NW, Wyoming Asso. 29-A... 146
31-40-78 NE, Salt Creek Cons. 18-A.. 60
34-40-79 SE, Salt Creek Cons. 36-A 60
31-40-78 SW, Salt Creek Cons. 1-A.... 25
35-40-79 NE, Midwest Oil Co. 24-I.... 250
23-40-79 NE, Midwest Oil Co. 31-I..... 500
14-40-79 NE, Midwest Oil Co. 16-A.... 60
34-40-79 NE, Midwest Oil Co. 3-A.... 42
2-40-79 NW, Midwest Oil Co. 3-A.... 452
35-40-79 NE, Midwest Oil Co. 31-A.... 150
25-40-79 NE, Midwest & Wyo. Asso. 16-A 70
25-40-79 SE, Midwest & Wyo. Asso. 19-A 50
36-40-79 NW, Midwest & Wyo. Asso. 19-A 25
36-40-79 SW, Midwest & Wyo. Asso. 20-A 60
34-40-79 SE, Salt Creek Cons. 36-I.... 1500
34-40-79 SE, Wyoming Asso. 34-I. 200
25-40-79 SW, Wyoming Asso. 20-A 60
27-40-79 NE, Midwest Oil Co. 22-A.... 25
14-40-79 NW, Midwest Oil Co. 15-A.... 25
11-40-79 SE, Midwest Oil Co. 33-A.... 30
29-40-79 Tract W, Texas Prod. Co. 20 50
19-40-79 Tract M, Texas Prod. Co. 13-A 30
32-40-78 Frantz, Continental Oil Co. 21-A 100
23-40-79 NW, Midwest Oil Co. 16.... 35
26-40-79 SE, Midwest Oil Co. 11 260
25-40-79 NW, Midwest Oil Co. 4-I. 65
13-40-79 NW, Midwest & Wyo. Asso. 14-A 30
34-40-79 NE, Wyoming Asso. 29-A.... 25
35-40-79 NW, Wyoming Asso. 36-A 40
25-40-79 SW, Wyoming Asso. 24-A.... 30
31-40-78 NW, Salt Creek Cons. 29-A 35
25-40-79 SW, Midwest Oil Co. 6-I.... 63
25-40-79 SW, Midwest Oil Co. 4-A.... 20
14-40-79 NE, Midwest Oil Co. 22 25
35-40-79 SW, Midwest Oil Co. 1-A.... 30
31-40-78 SW, Salt Creek Cons. 8-A.... 25
24-40-79 NW, Wyoming Asso. 13-A.... 40
20-53-100 NE, Pittsburg & Southwestern dry
3-26-90 SE, Prairie Oil & Gac Co. 70-A dry
7-26-89 Prod. & Refs. 5 ..... gas
7-27-95 Van Wyo, Prairie Oil & Gas 1 dry
30-34-81 Mosher No. 5 Syndicate..... dry
3-26-113 Newlon et al 15

Wells completed 47
Production 5288
Dry 4
Gas 1
Gas production 10,000,000

MONTANA

Wells Completed

26-15-30 Woods, Continental Oil Co. 4 dry
30-35-1 Maughan, Ohio Oil Co. 11... 18
20-33-1 Bailey, Flood Watson ..... dry
3-31-2 Holgard, Homestake Explor. 2 dry
34-35-2 Lashbaugh, Ferdig Oil Co. 18 dry
30-35-1 Stannard, Tri State Oil Co. 11 15
21-36-3 Herman, Kevin Oil & Gas 3 dry
30-35-1 Stannard, Rice Oil Co. 12 .... dry
30-35-1 Stannard, Rice Oil Co. 15... 10
17-34-2 DeGroat, Wenoah Sunburst 2.. 8
25-35-2 McKee, California Co. 5 .... dry
31-35-1 Allen, Big West Oil Co. 19.. 8
31-35-1 Allen, Big West Oil Co 21 40
32-35-1 Caine, 56 Petro Co. 15 20
31-35-1 Emmons, Dakota Montana 12 15
31-35-1 Emmons, Dakota Montana 13.. 120
31-35-1 Emmons, Dakota Montana 14 10
24-35-1 Wade, Clara Oil Co. 5 15
19-25-1 Kalispel-Kevin, P. M. K. Oils 4 35
28-34-1 Barger, O'Neil Bros. 1..... gas
31-35-1 Byrne, Fose Oil Co. 13 20
23-35-2 Zimmerman, Cope Oil Co. 1 .. 20
36-35-2 State, Adams Oil Co. 4..... dry
36-35-2 State, Adams Oil Co. 5..... 30
28-25-1 Levnick, Deloraine Oil Co. 3 20
32-35-2 Caine, 56 Petro. Co. 16.... 200
27-35-2 Lashbaugh, Ferdig-Sunburst 19 dry
1-34-2 Lewis, Ferdig Oil Co. 4 800
36-35-2 State, Homestake Oil Co. 14 .. 25
31-35-1 Skinner, Barnhill Units 1 .... gas
35-35-2 Abell, Ferdig Oil Co. 10....1600
26-35-2 Abell, Hardrock Oil Co. 2 25
14-34-2 Dachstein, Ohio Oil Co.... 30
27-35-2 Lashbaugh, Swift Current Oil Co. 2 30
34-25-2 Lashbaugh, Ferdig Oil Co. 17 250
24-34-2 Liberty, Medford Oil Co. 2.... 50
27-35-2 Lashbaugh, Victoria-Sunburst 1 300
8-34-2 Fleck, Wenonah Sunburst 1 300
8-34-2 Fleck, Wenonah Sunburst Synd. 1 50
30-35-1 Stannard, Rice Oil Co. 16.... 2000
6-34-1 Torberson, Arcus Oil Co. 1.. dry
31-35-1 Byrne, Rose Oil Co. 14..... dry
31-35-1 Allen, Big West Oil Co. 22... 150
36-35-2 Adams, Homestake Oil Co. 5 20
28-35-1 Levnick, Deloraine Syndicate 3 30
27-35-2 Lashbaugh, Wolf Development Co. 1 350
35-35-2 Byrne, Munger-Barr 4 25
24-1-21 Diamond, Record Petro. Co. 2 gas

Wells completed 48
Production 5779
Dry 12
Gas 3
Gas production 28,000,000

COLORADO

Wells Completed

8-20-69 Wallace, Wallace Oil & Mining Co. 50
31- 5-98 Morgan, Union Oil Co. 1... dry
19- 8-68 Larson, Union Oil Co. 2 ... 100
7- 9-68 Bubble Lake, Union Oil Co. ... 150
19- 5-93 Rolapp, Shaffer O. & R. .... dry
22-30-69 San Isobel Oil Co. 2 20
22-12-119 Wilson, W. A. Meyers et al.. gas

Wells completed 7
Production 320
Dry 2
Gas 2
Gas production 30,000,000

NEW MEXICO

Wells Completed

21-18-28 State, Flynn, Welch & Yates 45 18
21-18-28 State, Flynn, Welch & Yates 46 50
3-18-28 SW, Levers & Carper 3 50
35-17-27 SW, Empire Gas & Fuel Co. 50
13-18-27 NE, Hausenfue Drilling Co. dry
21-17-32 Maljamar Oil & Gas Co. 1 300
14-15-17 NW, Arkansas Fuel Co. .... dry
15-11-26 NE, Rogers et al 20
3-13-29 Bell, Marland Oil Co..... dry
5-18-28 Levers, Texas Prod. Co. 6.... 50
22-29-21 Bishop, R. M. Smith 3 15
3-27-17 Table Mesa, Continental Oil Co. 9 200
28-18-28 Flynn, Welch & Yates 47.... 50
28-18-28 Twin Lakes Oil Co. 8 100
3-22-28 NE, Blue Bird Oil Co. 2 .... dry

Wells completed 15
Production 900
Dry 4

BIG MUDDY
Wells Drilling

9-33-76 Crary, Texas Production Co. 33.
9-33-76 Crary, Texas Production Co. 33.
9-33-76 Humphrey, Continental Oil Co. 39.
9-33-76 Whitesides, Continental Oil Co. 40.

Shut Down

3-33-76 Fenix, Continental Oil Co. F4.

Rigs, 0; wells drilling, 4; total 4.

SALT CREEK
Rigs

6-39-78 SE, Mt. and Gulf 8-A.
35-40-79 SE, Midwest Oil Co. 31-A.
13-39-79 SE, Blackstone Salt Creek 4-F.
34-39-78 NW, Mammoth Oil Co. 302.
34-39-78 NW, Mammoth Oil Co. 305.
28-39-78 NW, Mammoth Oil Co. 405.
28-39-78 NE, Mammoth Oil Co. 406.
13-38-78 SW, Wyoming Teapot Oil Co.
16-39-78 NE, Nicolaysen et al.
19-40-78 NE, Norris Oil Co. 18-A.
10-38-78 NW, Mammoth Oil Co. 302.
2-39-79 NE, Sinclair Wyoming 11.
2-39-78 NE, Mt. and Gulf 29-A.
21-39-78 SE, Teapot Development Co.
1-39-79 SE, Continental Oil Co. 11-A.
5-39-78 NW, Carter Oil Co. 12-D.
17-39-78 SE, Argo Oil Co. 2-M.
8-39-78 NE, Western States O. and L. 21-A.

Wells Drilling

23-40-79 SE, Wyoming Oil Fields 18.
23-40-79 NW, Wyoming Oil Fields 34-A.
35-40-79 SE, Wyoming Oil Asso. 21-SD.
26-40-79 NW, Wyoming Asso. 22-A.
29-40-79 NW, Wyoming Asso. 17-A.
2-39-79 NE, Wyoming Asso. 16-A.
26-40-79 SE, Wyoming Asso. 26-A.
35-40-79 NW, Wyoming Asso. 24-A.
24-40-79 SW, Wyoming Asso. 18-I.
23-40-79 NE, Wyoming Asso. 13-A.
25-40-79 SW, Wyoming Asso. 31-A.
26-40-79 SW, Wyoming Asso. 19-I.
31-40-79 SW, Salt Creek Cons. 24-A.
3-39-79 NE, Salt Creek Cons. 3-A.
35-40-79 NE, Midwest Oil Co. 15.
35-40-79 SW, Midwest Oil Co. 23.
26-40-79 SE, Midwest Oil Co. 6.
35-40-79 NE, Midwest Oil Co. 22-I.
34-40-79 NE, Midwest Oil Co. 15-I.
35-40-79 SW, Midwest Oil Co. 21.
35-40-79 NE, Midwest Oil Co. 1-A.
1-39-79 NE, Midwest Oil Co. 8-A.
26-40-79 SW, Midwest Oil Co. 18-I.
32 40 78 Brown, Continental Oil Co. 20.
16-40-79 H. V. Meabon et al.
11-39-79 SW, E. T. Williams 15-A.
23-40-78 NW, Wyoming Oil Fields 15-A.
23-40-79 SW, Wyoming Oil Fields 4-A.
25-40-79 NE, Wyoming Oil Fields 21-A.
34-40-79 SE, Wyoming Asso. 7-A.
34-40-79 SE, Wyoming Asso. 8-I.
34-40-79 SE, Wyoming Asso. 33-I.
35-40-79 NW, Wyoming Asso. 31-I.
34-40-79 NE, Wyoming Asso. 36-I.
35-40-79 NW, Wyoming Asso. 15-I.
35-40-79 NW, Wyoming Asso. 6-I.
26-40-79 SW, Wyoming Asso. 31-I.
35-40-79 SE, Wyoming Asso. 4-I.
26-40-79 NE, Wyoming Asso. 20.
24-40-79 NE, Wyoming Asso. 19-A.
23-40-79 SW, Wyoming Asso. 29-A.
34-40-79 NE, Wyoming Asso. 36-A.
34-40-79 NE, Wyoming Asso. 36-A.
34-40-79 SE, Wyoming Asso. 1-A.
30-40-79 SE, Wyoming Asso. 26-A.
2-39-79 NE, Wyoming Asso. 26-A.
35-40-79 NW, Wyoming Asso. 31-A.
31-40-78 NW, Salt Creek Cons. 11-A.
34-40-79 SE, Salt Creek Cons. 34-A.
31-40-78 NW, Salt Creek Cons. 9-A.
11-40-79 SE, Midwest Oil Co. 15-A.
19-40-78 SW, Midwest Oil Co. 11-A.
23-40-79 SW, Midwest Oil Co. 5-A.
13-40-79 NW, Midwest Oil Co. 33-A.
13-40-79 NW, Midwest & Wyo. Asso. 20-A.
12-40-79 SW, Midwest & Wyo. Asso. 14-A.
26-40-79 SE, Midwest & Wyo. Asso. 11-A.
36-40-79 NE, Midwest & Wyo. Asso. 29-A.
16-40-79 NW, Midwest & Wyo. Asso. 6-A.
36-40-79 NW, Midwest & Wyo. Asso. 26-A.
36-40-79 SW, Midwest & Wyo. Asso. 13-A.
12-40-79 SW, Midwest & Wyo. Asso. 22-A.
21-40-79 SE, Hugh Johnson et al 11X.
18-39-79 Tract I, Ohio Oil Col. 3.
34-40-78 Continental Oil Co. 12-A.
25-40-79 NW, Wyoming O'l Fields 31-L.
25-40-79 NW, Wyoming Oil Fields 19-I.
23-40-79 SW, Wyoming Oil Fields 16.
26-40-79 NE, Wyoming Oil Fields 27.
26-40-79 NE, Wyoming Oil Fields 23.
14-40-79 SW, Wyoming Asso. 13.
24-40-79 SW, Wyoming Asso. 16.
26-40-79 NW, Wyoming Asso. 34.
25-40-79 NW, Wyoming Asso. 24.
26-40-79 NE, Wyoming Asso. 28.
26-40-79 NW, Wyoming Asso. 33.
34-40-79 NW, Wyoming Asso. 24.
3-39-79 NE, Salt Creek Cons. 1-A.
35-40-79 SW, Midwest Oil Co. 3-SD.
35-40-79 NE, Midwest Oil Co. 19-I.
35-40-79 SW, Midwest Oil 6-I.
35-40-79 SW, Midwest Oil 31-I.
26-40-79 SE, Midwest Oil. 1-I.
35-40-79 NE, Midwest Oil Co. 16-I.
35-40-79 SW, Midwest Oil 13-I.
26-40-79 SW, Midwest Oil 15-I.
2-39-79 NW, Midwest Oil 6-I.

26-40-79 SW, Midwest Oil 3, 4.
14-40-79 NE, Midwest Oil 21-A.
14-40-79 NE, Midwest Oil 22-A.
2-39-79 NW, Midwest Oil 8-A.
35-40-79 SW, Midwest Oil 31-A.
27-40-79 SE, Midwest Oil 30-AS.
7-39-79 SE, Continental Oil Co. 8-A.
14-40-79 SE, Midwest Oil 15-A.
5-39-79 NW, Western States O and L. 29-A.
28-40-79 SW, Jupiter Oil Co. 34 S.

Shut Down

23-40-79 SW, Midwest Oil Co. 1-L.
36-40-79 NE, Wyoming Oil Fields 36-L.
26-40-79 NE, Wyoming Asso. 4-L.
26-40-79 NE, Wyoming Oil Fields 22-L.
23-40-79 SE, Wyoming Oil Fields 6-L.
34-40-79 SE, Salt Creek Cons. 36-L.
26-40-79 NE, Wyoming Asso. 31-L.
26-40-79 SE, Midwest Oil Co. 16-L.
23-40-79 NW, Wyoming Oil Fields 36-L.
2-38-78 SE, Staley-Foley Synd. 34-A.
35-39-78 SW, Staley-Foley Synd.
26-40-79 SE, Wyoming Asso. 22-L.
10-40-79 SE, Empire State Oil 25-A.
28-39-78 NE, Mammoth Oil Co. 101.
29-39-78 NE, Mammoth Oil Co. 108.
28-39-78 NE, Mammoth Oil Co. 302.
28-39-78 NW, Mammoth Oil Co. 205.
4-38-78 NE, Mammoth Oil Co. 101.
23 39 79 NE, Evans Oil Co.
29-39-78 NE, Omaha Lusk Oil Co.
6-39-78 NE, Mt. and Gulf 34-A.
32-40-78 SW, Jupiter Oil Co. 27-A.
2-39-79 NW, Midwest Oil Co. 15-L.
23-40-79 SE, Wyoming Oil Fields 4-L.
35-40-79 SW, Midwest Oil Co. 34-L.
34-40-79 SW, Continental Oil Co. 35-A.
23-40-79 SW, Wyoming Asso. 19-L.
34-40-79 NW, Wyoming Asso. 34-X.
2-39-79 NW, Midwest Oil Co. 3-L.
Rigs, 18; wells drilling, 127; total, 145.

LANCE CREEK

Wells Drilling

4-35-65 Putnam, Ohio Oil Co. 3.
35-36-65, Apex, Buck Creek O. & G. 2.

Shut Down

18-35-65 NE, Union Oil Co.
Rigs, 0; wells drilling, 3; total 3.

BIG HORN BASIN

Rigs

5-47-90 Hotzler, Ohio Oil and Refg. 2, 3.

Wells Drilling

5-58-60 Norwood, Carter Oil Co. 1.
32-58-99 Tip No. 7, Hardrock Oil Co. 1.
8-51-100 Sonners, Ohio Oil Co. 3.
15-55-97 Lot 43, Standard of Calif.
31-48-90 Tensleep, Ohio Oil Co. 3.
31-58-99 Elk Basin, Midwest Refg Co. 2.
5-43-90 Avery, Utah Oil & Refg. 1.
26-43-91 Ft. Collins, Utah Oil & Refg. 1.
35-43-91 Weller, Utah Oil & Refg. Co. 2.
24-56-98 Garland, Prod. & Refs. 2.
11-40-90 Garry Oil & Dev. Co.
15-49-91 Shaffer & Tilley.
18-46-92 Washakie, Ohio Oil Co. 4.
18-44-93 West Zimmerman Butte Oil.
20-52-101 NE, Washington Oil & Gas.
14-47-102 Big Horn Dev. Co.
21-53-101 Taylor Bros.
7-46-92 Washakie, Ohio Oil Co. 1.
5-51-97 SW, M. Carroll et al.
9-54-95 SW, Wisconson-Hines Co.
15-44-95 SW, F. L. Pierce.
19-54-93 Crystal Creek Sknd.
32-47-100 NW, Prairie Oil & Gas.
19-46-98 State, Ohio Oil Co.
-56-98 Elk Buttes Oil & Gas.
34-45-91 SE, Union Oil Co. 1-A.
28-43-91 NW, Union Oil Co. 1-A.
10-56-95 SE, Allen Oil Co.
31-43-93 Utah Oil & Refg. 3.
33-43-94 SW, Wyoming Montana O'l Co.
17-46-98 Washakie, Ohio Oil Co.
28-44-95 NE, F. A. McPherson.
2-44-96 F. A. McPherson.
11-49-102 T. A. Stancliffe.
29-56-97 SW, Utah Southern Oil Co.
8-43-91 Murphy Dome, Prod. & Refs. 1
33-56-98 Cross Gas, Ohio Oil Co. 2.
21-53-101 Cody Oil & Gas 2.
9-46-101 Union Oil of Calif.

Shut Down

2-47-100 Midwest Refg. Co.
35-57-91 NE, American Indian Oil Co.
4-91-100 Florence Oil Co.
-55-97 Griffin, Allen Oil Co.
24-56-97 Linton, Allen Oil Co.
31-45-99 NW, Kasoming Oil Co.
27-46-98 Rankin, Dickie Oil Co.
8-46-98 Big Horn Dev. Co.
19-51-92 Bruce Holding Co.
34-43-92 C. D. Markham et al.
10-54-95 SE, Westland Oil Co.
35-55-95 Westland Oil Co.
11-49-102 Omar Oil & Gas Co.
10-56-98 Tumanor Oil Co.
19-51-92 Torchlight Oil Corp.
5-54-95 SW, Royal Oil & Refg. Co.
Rigs, 2; wells drilling, 56; total, 58.

LOST SOLDIER AND CARBON COUNTIES

Rigs

24-21-88 E. R. Goode.
12-19-87 Marland Oil Co.
11-26-90 Prairie Oil & Gas 73-A.

Wells Drilling

34-22-80 SW, A. A. Akers 1.
11-26-90 Prairie Oil & Gas 47-A.
29-26-87 Producers & Refiners 3.
28-21-86 Grenville, Producers & Refiners 1.
14-21-84 St. Marys, Prod. & Refs. 1.
3-27-90 Goode, Texas Prod. Co. 3.
11-26-90 Prairie Oil & Gas 73-A.
16-26-88 General Petroleum Co.
25-26-87 Prod. & Refs. 17.
11-26-90 Prairie Oil & Gas 65-A.
11-26-90 Prairie Oil & Gas 71-A.
14-20-88 Lake Valley Oil Co.
30-26-87 Prod. & Refs. 1.
3-26-90 Prairie Oil & Gas 72-A.
29-26-87 Producers & Refiners 18.

Shut Down

26-26-88 SE, M. M. Armstrong.
23-26-87 SE, Marvin Oil Co.
3-26-90 Sand Hills Oil Co. 5.
28-26-88 Gov't. land, Columbia Pet. Co.
4-26-90 SE, Sand Hills Oil Co. 4.
5-26-90 SE, Major Oil Co.
26-25-89 NW, E. R. Goode.
24-27-90 SW, Annabelle Wyoming.
21-26-89 Portland Wyoming 3.
28-26-86 Portland Wyoming 1, 2.
3-25-86 Gov't land, General Pet. Co. 2.
Rigs, 3; wells drilling, 27; total, 30.

ROCK RIVER

Wells Drilling

1-18-78 Dutton Creek, Midwest Refg. 6-X.
3-19-78 H. & C., Ohio Oil Co. 4.
2-19-78 H. & C., Ohio Oil Co. 11.
34-20-78 SW, M. L. Lundy.
8-17-77 SE, Texas Prod. Co.
25-27-79 SE, Southwestern Pet. Co.

Shut Down

12-16-74 SW, G. A. Briggs 1.
34-23-79 Central Pipe Line Co.
10-18-77 Carbon County Oil Co.
12-27-77 McLaughlin et al.
26-21-78 NW, Southwestern Pet. Co.
23-21-79 SE, Southwestern Pet. Co.
35-21-79 NW, Southwestern Pet. Co.
Rigs, 0; wells drilling, 13; total 13.

ROCKY MOUNTAIN

FREMONT COUNTY

Rigs

22- 6-101 Keenan, Texas Prod. Co. 5.

Wells Drilling

10-32-95 Producers & Refiners 5.
21- 1- 1 Bridger Oil Co.
19-27-96 Brimmer, Prairie Oil & Gas 2.
9-31-98 Martin F. Fold.
14-32-80 Myers Pet. Co.
13-28-93 Spencer et al.
10-28-92 SE, Union Oil Co.
18-28-93 Producers & Refs. 1.
13-28-93 Producers and Refiners 3.
27- 6- 3 Kinney Coastal Oil Co.
21- 1- 1 Wyoming Syndicate.
14-32-95 NW, Riverton Petro. Co.
15- 5- 1 Carter, Union Oil Co.
30- 1- 2 Wm. M. Campbell.
27- 3- 1 Lot 4, Pilot Butte Oil & Gas Co.
15-32-95 SE, Texas Prod. Co.
17-33-94 Winter-Baker Interests.
27- 1- 1 Garner, Union Oil Co.
14-32-95 Producers & Refs. 7.
29-32-98 Frank England, Trustee.

Shut Down

26-27-93 American Workers Oil Co.
36-37-94 Wyoming Syndicate.
6- 6- 2 SW, Union Oil Co.
18-26-95 Sage Creek Petro. Co.
28-27-95 Fremont Petro. Co.
32- 6- 2 Miles City Petro. Co.
3- 1- 2 NE, Teton Petro. Co.
4-31-98 Pilot Dome, Wyoming.
4-31-98 Burnside Oil Co.
24-32-95 Seal Oil Co.
Rigs, 1; wells drilling, 30; total, 31.

OSAGE

Rigs

30-48-63 NE, Glenn Oil Co.
31-47-63 L. B. Hanson.
17-46-63 LaFleische Oil Co.

Wells Drilling

Fawcett Ranch, Harry Briggs, et al.
42-46-63 Wyoming Oil & Gas.

Shut Down

10-45-61 Lenhardt & Briggs.
8-46-63 Griffith Oil Co.
Rigs, 3; wells drilling, 4; total, 7.

NATRONA COUNTY

Rigs

Greybull Dame, Foreman et al.

Wells Drilling

Casper Dist., Wheeler, Millard et al.
26-35-84 NW, Brennan et al.
3-33-83 Fargo Western Oil Co.
3-37-85 Notches, Midwest Refg. Co.
32-38-83 Wilson, Marland Oil Co.
33-34-82 Bradford Wyoming.
32-34-77 Geary Dome, Continental Oil Co.

Shut Down

15-32-82 Bessemer Bend Dev. Co.
5-39-80 NW, Vernon Oil Co.
1-36-85 New York Oil Co.
Rigs, 1; wells drilling, 10; total, 11.

LINCOLN AND UINTAH COUNTIES

Rigs

31-28-113 Tip Top Oil Co.
12-39-113 Cretaceous Oil Co.
27-27-113 Beneficial Oil Co.
4-26-113 Wyoming Reserve Oil Co.

Wells Drilling

9-29-113 Guy B. Hockett et al.
16-27-113 Good & Nutting.
29-19-116 C. C. Conger.
14-21-117 NE, Pioneer Oil Co.
30-15-118 NE, Stanburg Petro. Co.
22-27-113 NW, W. F. Atkins.
26-27-113 NW, Myrta Bennett.
17-27-113 SE, Elkhorn Oil Co.
Near Afton, Great Western Oil Co.
23-31-113 Three States Oil Co.
3-26-113 Superior Oil Co.
15-21-117 Pacific Properties Co.
6-15-118 Vulcan Oil Co.
7-28-114 Chas. Lackey et al.
23-27-113 Fawcett Interests.
6-15-118 Olson Brothers.
26-27-113 Wooten Interests.
22-27-113 Portland Oil Co.
8-26-113 SE, Reece Oil Co.
27-27-113 NW, Reece Oil Co.
9-26-113 Uintah-Transcontinental Oil.

Shut Down

22-19-110 NE, Granger Oil & Gas.
22-28-112 NE, Margaret Kay.
24-15-118 NW, Mrs. D. Connel 3.
22-26-113 Big Piney Oil Co.
4-26-113 SE, Uintah Oil Co.
3-26-113 Wyoming Reserve Oil Co.
35-27-113 SE, Associated Producers Synd. 2.
27-27-113 NW, Beneficial Oil C.o
32-19-116 Conger et al.
Rigs, 4; wells drilling, 30; total, 34.

BAXTER BASIN

Wells Drilling

11-19-104 Producers & Refiners-Marland.

Shut Down

26-17-104 Associated Oil Co. 3.
23-17-104 SE, Associated Oil Co.
24-17-104 SE, Montacal Oil Co.
8-16-104 SE, Montacal Oil Co.
30-18-104 Midwest Refg. Co. 6-AX.
26-17-104 SE, Associated Oil Co.
27-27-104 Montacal Oil Co.
Rigs, 0; wells drilling, 8; total, 8.

MISCELLANEOUS

Rigs

Baggs Dome, M. M. Armstrong.
Agate Basin, Hollingsworth et al.

Wells Drilling

21-31-69 Ackard et al.
5-31-70 Criterion Oil Co.
35-17-70 Horse Creek, Carter Oil Co.
17-48-82 Rider, Carter Oil Co.
17-46-82 R. Tarrant et al 2.
12-26-27 Platte Valley Drilling Co.
8-44-60 Briggs & Sartain.
5-51-67 C. M. Carroll et al.
28-42-79 Seattle Syndicate.
Guernsey District, Illinois Syndicate.
Buffalo District, Kinney Coastal Oil Co.
16-33-68 SW, Schuyler et al.
1 32-68 A. E. Mauft et al.
32-62-67 SW, Western Consolidated Oil Co.
4-32- 82 SE, Carl Sackett et al.
7-48-82 Fairway Oil Co
Rigs, 2; wells drilling, 16; total, 18.

MONTANA

CAT CREEK

Rigs

17-15-30 SW, L. F. Sonntag.

Wells Drilling

11-15-29 Cooke-Coolidge.
12-15-29 NE, Standard of California 7.
12-15-28 VanTassel, California Co.
23-14-28 Winnett Pacific Oil Co.

Shut Down

21-15-30 Masser, Kessling Oil Co.
1-15-29 Custer Oil Co.
9-15-29 NE, Frantz Corp.
14-15-29 Clayton, Frantz Corp. 15.
36-16-28 NE, Hardrock Oil Co.
5-15-29 Midwest Refg. Co.
7-15-29 NW, Hogan et al 2.
11-15-29 Fifty Six Pet. Co.
15-15-30 Swartz et al.
28-16-28 Fenrlen et al.
Rigs, 1; wells drilling, 14; total, 15.

KEVIN SUNBURST

Rigs

30-35- 1 Maughans, Ohio Oil Co. 13.
18-34- 1 Johnson, Ohio Oil Co. 2.
15-34- 2 Moffat, Ohio Oil Co. 1.
29-35- 1 Benton, Arronow Oil Co.
20-31- 2 McBride, Canadian Oil Co.
25-36- 2 Troy Island Oil Co.
17-31- 1 Potlatch Oil Co. 2.
30-35- 1 Stannard, Wallace Oil Co.
20-35- 1 Steel, Big West Oil Co.

Wells Drilling

14-34- 2 Dachstiener, Ohio Oil Co. 1.
21-35- 1 White, Ohio Oil Co. 2.
4-35- 2 Baker, Ohio Oil Co. 10.
30-35- 1 Maughan, Ohio Oil Co. 12.
35-35- 2 State, Homestake Explo. 15.
26-35- 2 Abell, California Co. 7.
31-35- 1 Emmons, Dakota Montana 15.
31-35- 1 Emmons, Dakota Montana 16.
11-34- 3 Freemke, D. A. S. Oils, 3.
14-34- 2 Jenkins, Creel Sunburst 2.
26-35- 2 Abell, Hardrock Oil Co. 3.
18-34- 1 Hanna, Queen City Oil Co. 1.
32-35- 1 Putnam, Pan Canadian 2.
21-35- 2 Harter, L. W. Hill 4.
12-35- 2 Barth, Colonel Kobes 1.
24-35- 2 Hagerty, Couer D'Alene Oil 3.
9-34- 2 Dexroat, Johnson Oil Synd. 3.
30-35- 1 Stannard, Security Oil Co. 8, 9.
27-35- 2 Lashbaugh, O'Neil Bros. 4.
27-35- 2 Lashbaugh, Wolf Dev. Co. 2.
35-34- 2 Abell, Ferdig Oil Co. 10.
7-34- 1 Carlson, Dakota Montana 2.
1-34- 2 Lewis, Ferdig Oil Co. 5.
6-35- 1 Chisholm Oil Synd. 4.
10-34- 1 Cagney, O'Neil Bros. Marland.
10-34- 1 Hocksprung, O'Neil-Carter.
3-34- 1 Heanel, Bi-State Oil Co.
29-35- 1 Anderson, Red Deer Oil Co. 7.
31-32- 1 Zenith-Orcutt 1.
25-35- 2 Knobes, Howe, McCormick.
25-35- 2 Stannard, Wyomont P. & R. 8.
1-34- 2 Steele, Oldsbury Synd.
26-35- 2 John, Trap Oil Co.
7-34- 1 Russel, Reservation Oil Co.
11-34- 1 Cascade Oil & Gas.
30-35- 1 Stannard, Rose Oil Co. 3.
9-32- 2 Suhr, Sunburst Prod. Co.
33-34- 2 NE, Frazier Oil Co.
8-34- 2 Pittsburg Montana Oil Co.
32-36- 2 Roundsley, Sunburst Oil & Gas.
24-32- 1 Shelby Syndicate.
20-35- 2 Halter, Sunburst Prod. Co.
18-34- 1 Skinner, Creel et al.
32-35- 1 Putnam, Keystone Oil Co.
7-34- 1 Harte, Russel et al.
30-35- 1 Tri State Oil Co. 3.
35-35- 2 Sunburst Oil & Gas.
22-35- 2 SW, Lorensen et al.
29-35- 2 Maughan, Sweeney Oil Co. 4.
17-35- 2 Frazier, Rice Oil Co.
30-35- 1 Stannard, Tri State Oil Co. 5.
1-34- 2 Steele, Bruce Radigan 2.
8-34- 2 Hurley, McDonald et al.
1-34- 2 Faunce, McIntire Beckett.
1-35- 1 Berger, Sand Point Oil Co.
23-36-3 Carroll, Red Top Oil Co.
18-33- 2 Halverson, Minot-Shelby.
5-35- 3 Bell Fey Co.

Shut Down

28-35- 1 Shelby Federal Miller.
23-33- 1 Webb, Shelby Oil & Gas.
12-34- 1 Peterson, Lucky Forty Oil Co.
13-32- 2 Campbell, Campbell Syndicate.
16-34- 2 Rainbow Oil Co.
21-34- 1 Adams, Potlatch Oil Co.
Rigs, 9; wells drilling, 65; total, 74.

MISCELLANEOUS

Rigs

5-12-25 Minn.-Flatwillow Oil Co.
24-15-14 Fullerton Oil & Gas.
12-10-32 Hibbard Oil Co.
4-28-30 Mid-Continent Oil Co.
34-23- 2 Rainbow Syndicate.

Wells Drilling

33-16-28 NW, Oakmont Petro. Co.
32- 4-28 SW, Empire Oil & Gas Co.
25- 1-21 NE, Linco Oil Co.
35-36- 3 Hi-Land Oil Co.
25-11-24 Areolite Oil Corp.
12-22- 2 Mann, Allen Oil Co.
18-22- 3 Elkhorn Oil Co. 1, 2.
7- 8-57 Wolf Creek Oil Co.
31-21-20 Round Butte Oil Co.
23- 1-21 Delmar Oil Co.
24- 1-21 Diamond, Record Petro. Co. 3.
36- 1-21 State, Springdale Oil Synd.
24- 1-21 SW, Record Petro. Co. 4.
Medicine Hat, Roth Syndicate.
34-23- 2 Allen Oil Co.
1-31-31 Big Dome Oil Co.
28- 8-45 Montana Bell Oil & Gas.
25-17-24 California Co.
21-37- 5 Utah Western Petro. Co.
31- 7-21 SW, Atlantic Petro. Co.
13- 8- 2 Coal Ridge, Montana Oil & Gas.
5- 3-16 Montana Portland Oil Co.
34-16-28 H. H. Swartz, Jr.
9-31-19 California Co.

Shut Down

18- 2-23 SW, Murray Bros. 4.
17- 3-23 SE, McDermott et al.
34-22- 1 Great Northern Mutual.
32-25-30 Butler Oil & Gas.
24-30- 1 Continental Prod. Co.
17- 3-19 Snyder, Mid Northern Oil Co.
4-27-20 California Co.
20-24- 1 McDonald et al.
3-27- 8 Robinson et al.
McDonald Creek, Wilson Fisher 3.
32-36- 2 Weill Syndicate.
7- 8-58 California Montana.
17- 2-18 NE, Gibson Land Co.
29-38-28 Glasgow Exploration Co.
25-12- 1 Ainsworth, Neudigate Interests.
18-30- 3 Great Northern Producers.
4- 2-25 SW, McMinnemin et al.
24-10-39 Jones et al.
2-26- 2 Jones, M. M. Edwards.
5-2-23 NE, American Indian Oil Co.
35-32-32 SW, Bowdoin Oil & Gas.
7-27- 7 Circle Oil Co.
26-10-29 Stellar Oil & Gas.
32-30- 2 Drake Oil Co.
18- 6-23 Minnemier & Newman.
6-13-24 Fulton Oil Co.
7-21- 1 Tri City Oil Co.
12-11-13 Kalispell Synd.
2-28- 2 NE, Dry Fork Oil Co.
8- 4-22 NE, Hoosier Oil Co.
24- 5- 8 Potter Basin Oil & Gas.
10-18- 2 NE, Moscow Idaho Oil Co.
38.30- 4 NW, West Virginia Oil Co.
24-14-25 NW, Henry Seibert.
14-31- 1 NW, Dunkirk Oil Co.
6- 2-24 American Indian Oil Co.
9-10-38 SE Stellar Oil & Gas.
5-35- 1 NE, F. G. Ostland.
Rigs, 5; wells drilling, 64; total, 69.

COLORADO

Rigs

19- 8-68 Krause, Union Oil Co. 1.
7- 9-68 Stutchell, Union Oil Co. 2.
7- 9-69 Gault-Platt, Union Oil Co. 3.
7- 9-68 Dement, Union Oil Co. 1.
30- 8-68 Johnson, Union Oil Co. 1.
8- 6-86 Edwards, Texas Prod. Co. 1.
5- 6-86 Ervin, Texas Prod. Co. 1.
8-20-69 Griffith, Wallace Oil & Mining Co. 3.
10- 3-44 Yuma Valley Oil Co.
1- 8-68 Morrel, Petro. Prod. Co.
17- 8-68 Ft. Collins Chief Oil Co.
29-10-68 American Petro. Co.
12-38-78 Green Mountain Petro. Co.
27- 2-70 Rainbow Oil Dev. Co.
31- 9-68 Midwest Oil & Gas Co.
26- 9-69 NW, Farrel et al.
8- 9-68 NE, Union Junior Oil Co.
36-10-68 State, Seneca Oil Co.
10-10-61 SE, Dougherty et al.

Wells Drilling

30- 8-68 Whitaker-Blunck, Union Oil Co. 3.
30- 8-68 Whitaker-Blunck, Union Oil Co. 2.
18- 6-86 Quaintance, Texas Prod. Co. 2.
18- 6-86 State, Texas Prod. Co. 1.
31- 2-102 Emerald, Texas Prod. Co. 2.
10- 4-91 Wick, Texas Prod. Co. 3.
16- 3-91 Henderson, Marland Oil Co. 1.
30- 2-102 Rangeley, Midwest Refg. Co. 2.
30- 2-70 Spurgeon, Boulder Petro. Co.
35-22-65 NE, San Carlos Oil Co. 1.
34-17-70 Mutual Oil Dev. Co.
13- 1-46 Yuma, Yuma Oil Co.
4-46-17 Cinco-Minas Oil Co.
23-33-12 Pulliman, Erdman et al.
32-33-12 Hutchinson, E. J. Miley.
8-20-69 Loy, Rosie Oil Co. 2.
36- 8-69 State, Atlantic Petro. Co.
30-10-68 Buckeye, Union Oil Co. 4.
18- 6-86 Enck, Union Oil Co. 2.
36- 9-69 State, Union Oil Co.
15-21-65 Union Oil of Colorado.
10-24-69 Panuco Exploration Co.
14- 1-68 Smith, Retter Oil Co.
27-20-69 NW, Good Luck Oil Co.
22.12-100 Wm. T. Morris et al.
1-20-70 Continental Oil Co. 573.
9-20-69 Continental Oil Co. 575.
9-20-69 Continental Oil Co. 576.
33- 5-91 Knowlton, Texas Prod. Co. 8.
10- 4-91 Wick, Texas Prod. Co. 4.
22- 4-92 Parkinson, Midwest Refg. Co. 4.
24- 2-103 Tidewater Associated Oil Co.
23- 1-70 Denies, Repollo Oil Co.
20-10-68 Plummer, Union Oil Co. 1.
7- 9-68 Yockey, Union Oil Co.
4- 6-59 Belmont Oil Co.
16-10-68 Buckeye, A. A. Rollestone Co.
28- 3-65 Watkins, Miller Oil Co.
24- 6-91 Patterson, Platte Valley Pet. Co.
1- 2-68 Orrison, Municipal Oil Co.
33- 8-69 NE, Hobart Petro. Oil Co.
21-20-69 Majada Oil & Gas.
13-33-12 NW, W. H. Hall et al.
34-32-65 No Jack Oil Co.
8- 9-69 Warren, Union Oil of Colorado.
6- 7-68 Brown, Fifty Four Oil Co.
13.33-13 Hall Murray Oil Co.
5- 8-103 Gypsy Oil Co.
4- 6-68 Webster, Douglass Oil Co.
17- 5-64 Hog Ranch, Roland Oil Co.
5- 6-68* Majestic Oil Co.
4-32-67 Tulsa Oil Leasing Co.
34- 8-68 Ruff, Victory Oil Co.
9-12-68 Panuco Exploration Co.
1-9-68 NW, Great Northern Oil Co.
30-27-45 NW, Lamar Oil Co.
34-17-67 Mutual Oil Dev. Co.
12- 9-69 McCullam, Continental Oil Co.
16-21-65 Columbia Heights Oil Co.
9-17-67 John, Jr., Red Creek Oil Co.
Fremont County, Parkdale Oil & Gas.
28-28-52 SE, Empire Oil & Gas Co.
30-16-68 Warren, Poudre River Oil Co.
1- 8-68 Warren, Consolidated Oil Fields.
31-18.51 Mineral Exploration Co.
16-20-69 E. R. Goode et al 2.
17- 9-68 Elder, Farrel's Associates.
34- 8-69 Ruff, Equitable Oil Co.
Florence Field, Florence Petro. Co.
5-12-62 Tilum, Roland Oil Co.
3.32-12 Leidecker Petro. Co.
30-27-45 Johnson, Chesapeake Oil Co.
8- 8-102 Smith, Sun Oil Co.
11- 4- 8 H. H. Temple et al.
6-23-62 State, Bent County Oil & Gas.

Shut Down

25- 1-69 Everhard, Boulder Oil Corp.
25-24- 1 SW, Utah Southern Oil Co.
32-20-63 Baxter, Salida O. & R. Co. 2.
31- 2-96 NE, White River Dev. Co.
11- 1-44 Hildreth, Hessick Drilling Co.
28- 7-92 NE, Bowles Oil Co.
17-34- 2 C. W. Kirkwood.
6- 8-102 Linquist, Midwest Refg. Co.
13- 8-68 Hoff, Continental & Sunset.
33- 5-91 Hamilton, Texas Prod. Co.
28-28-32 S. E. Colorado Oil Co.
28-27-70 Gehrung, Sand Hills Oil Co.
32-31-61 Colorado Oil & Gas.
23- 6-69 Ruckvetter, Wellington Oil Corp.
19- 5-69 Alps, Gateway Oil Co.
23- 9-69 Waverly, Consolidated Oil Fields.
32-10-68 SE, Imperial Oil Co.
25- 8-68 NE, American Petro. Corp
24- 9-69 Hanna, Wellington Oil C.
6- 7-68 NE, Bonner Oil Co.

17-17-64 NW, Peerless Oil Co.
30- 4-68 NW, Panuco Exploration Co.
4-45-16 Gilmore Oil Co.
24- 2-103 Rigby, Midwest Refg. Co.
Rigs, 19; wells drilling, 100; total, 119.

UTAH

Rigs

16-28-20 Hazelwood, Utah Southern & Equity Oil Co.
6-30-21 Bodie, Empire Gas & Fuel Co.
18-23-21 Crescent Dome Petro. Co.

Wells Drilling

8-26-22 Utah Oil Dev. Co.
4-22-19 SE, Crescent Eagle Oil Co.
31- 9- 8 Utah Petro. Co.
19- 9- 8 E. J. Raddatz.
27-41-19 Utah Southern Oil Co.
35-21-16 Culbertson, Marland Oil Co.
36-26-20 Shaffer, Midwest Refg. Co. 1.
19-22-21 Utah Oil & Refg. Co.
36-40-90 Utah Oil & Refg. Co. 2.
31-43-10 Utah Oil & Refg. Co. 3.
16- 2- 5 State, Western Empire Oil Co.
32-14-17 Monroe Oil Co.
23- 3-24 Clay Basin, Prod. & Refg. Co. 2.
17-27-20 Shaffer, Midwest Refg. Co. 1.
22-14-92 Mt. States Petro. Co.
27-21-19 Western States Dev. Co.
4-19-25 Chas. Orchard et al.

Shut Down

2-12-20 L. L. Travis.
21-22-22 Hope Syndicate.
6-14-13 San Juan Dev. Co.
22-42-17 Monumental Oil Co.
12-19-13 Ute Pet. & Utah Southern.
13- 4-16 Castle Dale Oil Co.
27-16- 4 Producers Oil Co.
Lakeside Dome, W. R. Holmes.
Diamond Fork, Franko Utah Oil Co.
34-25-21 NW, Big Six Oil Co.
25-13-13 Utah Central Oil Co.
Diamond Fork, Gustaven Oil Co.
Rosell District, Lakeside Oil Co.
7-21-19 Stanburg Petro. Co.
Rigs, 3; wells drilling, 31; total, 34.

NEW MEXICO

Rigs

18-17-32 Mitchell, Ohio Oil Co. 1.
20-31- 1 Paul S. Ache et al.
9-30-11 F. G. McMahon et al.
19-36-34 SW, Sinclair & Fenton.
17-31- 8 Huntington Park Oil Co.
10- 4-28 NW, Oliver Well.
5-18-28 State, Lever et al.
36- 1-21 Ingram, Navajo Oil Co.

Wells Drilling

3-18-28 Flynn, Welch & Yates 49.
10-18-28 Dunn, Flynn, Welch & Yates 1.
4-15-16 Jones, Marland Oil Co. 1.
3-29-19 Continental Oil Co. 19.
9-19-28 Henderson-Dexter-Blair.
21-18-28 NE, Lakawana Oil Co. 7.
5-18-27 NE, Swartz et al.
22-17-31 NE, Skelly Oil Corp.
1-18-31 SE, Sullivan et al.
16- 8-27 Campbell, Colorado Gas & Fuel Co.
36-11-27 SW, Buffalo Roswell.
2-13-14 State, Dysart et al.
21-14- 9 S. Dysart et al.
-32- 1 Albuquerque, Prairie O. & G.
26- 6- 3 Acme Oil Co.
16-12-15 State, S. Dysart et al.
12-11-11 S. Dysart et al.
32- 7-10 SW, California Exploration Co.
24-31-11 Southwest Dev. Co.
11-29-11 Ross, Bloomfield Realty Co.
8-29- 8 Union Oil & Mining Co. 2.
22-29-11 Bishop, Smith & Miley 3.
9-30-11 Mexahoma Oil Co. 2.
18-18-28 Danciger-Beesom 2.
3-27-17 Table Mesa, Continental Oil Co. 8.
8-18-28 New State, Ohio Oil Co. 2.
5-17-32 Mitchell, Maljamar Oil & Gas.
3-17-32 Pearsall, Maljamar Oil & Gas.
13-18-32 McDonald & Jewett, Maljamar Oil mar Oil & Gas.
35-17-28 NW, Philips & Welch.
10-20-20 State, Cook-Ironsides.
27-19-38 Govt., Mesculero Petro. Co.
4-17-34 State, A. C. Bridges.
29-17-29 Texas Prod. Co.
24-10-36 SE, Devites et al.
11- 5-35 Sanders, Frio Oil Co.
11- 3-32 Gurley, Cotillion et al.
30-14- 9 Santa Fe, Hurst et al.
4- 1-30 NW, Capitol Oil Co.
32- 6- 1 New Mexico Dev. Co.
8- 6- 1 Navajo Oil Co.
10- 3-17 NW, Navajo Oil Co.
26- 7- 2 Swisher & Wallace.
13- 6- 2 Hub Oil Co.
25- 7- 2 Curtis & Mays.
32- 7-10 Minerman et al.
10-29-24 Eureka Oil Co.
10-28-26 Moore, Bevins & James.
2-29-19 Rattlesnake, Continental Oil 17.
15-21-33 NW, Covert et al.
29-17-18 Wilson, Texas Prod. Co.
32- 4- 6 McDonald, Ohio Oil Co. 1.
30-20-10 Benedum & Trees.
29-10-10 Duke City Pet Co
27-17-16 Chebeque Syndicate
22-35-21 Embar Oil Co
8-26-18 Tocito, Continental Oil Co.
15-17-32 Beardsley, Maljamar Oil & Gas.
5-18-32 Walker, Maljamar Oil & Gas.
1-18-32 Stroup, Maljamar Oil & Gas.
5-17-28 SE, Miley Oil Co.
18- 7-21 Ventura Oil Co.
3-18-27 Mann-Compton.
16-18-28 Compton, Hausenfus, Lewellyn.
15-18-28 Wians, Harris & Rehn.
20-20-10 Pittsburg Oil & Dev. Co.
29- 1-33 Steel-Rhinesmith.
17-18-28 SW, Cummins 2.
4-18-28 SE, Pueblo Oil Co.
20-29-11 NE, West Coast Gaso Co.
4-21-27 Olson, M. M. Miller.
15-29-11 Bloomfield Oil & Gas.
15-23-24 California Co.
24- 8-23 SE, Lewis et al.
16-29-11 SE, C. S. Ringle.
34-29-11 C. S. Ringle.
4-21-30 SW, Van Cleve & Kronen 2, 3.
24-10-27 NW, R. C. Christman.
24-31-15 W. R. Childers.
8- 2-14 Simmons et al.
17-28-28 NW, W. G. Hurst.
9-10-28 SW, Danciger Bros.
33-17-20 SW, Wooley-Jones.
1-17- 9 Welch et al.
3-21- 2 Williams et al.
15-29-11 Butler-Stonacher Synd.
19-21-19 NE, F. A. Black Drilling Co.
25-17-26 Patterson & Stumpi.
15-15-29 Southern Exploration Co.
25-11-26 SW N. Jones.
7-19- 1 LaVentana Oil Co.
22-18-27 SE, Colorado Drilling Co.
8- 6- 1 NW, DeChaves Pet. Co.
18-18-28 Danciger-Beeson L.
8-18-28 NE, Sidler Drilling Co.
1- 6-27 SW, Steel-Rhinesmith.
9-6-24 Grady Oil Co.
4- 2-20 Hinkle et al.
14-13-14 State Cons. Oil Co.
9-29-11 Bruce Breagle.
24-30-13 SW, Portage Oil & Gas.
33-18-28 SW, Snowden-McSweeney 4.
19-18-29 Bujac-Wade-Murphy.
1- 2-32 NE, Painter et al.
34-23-21 H. D. Adders.
34-11-11 Garland, Congress Oil Co.
30-30-15 Bowman, Williams et al.
21-25-30 Sun Oil Co.
8-11-23 Gibson Oil Co.
25-31-18 Bartlett, Union of California.
16- 1-27 McAdoo, Navajo Oil Co.

Shut Down

12-17-31 Nichols, Ohio Oil Co.
22-19-27 NW, Valley Oil Corp.
30- 4- 9 Red Feather Oil Co.
8-30- 9 Huntington Park Oil Co.
25-30-12 NE, Hall et al.
31-19-28 Pruitt, Ohio Oil Co.
21-17-28 Johnson, Ohio Oil Co.
10-27-17 Navajo, Continental Oil Co. 7.
31- 3-15 NW, Wyo. Colo. Oil Co.
22-19-27 State, Oscar Howard.
24-29-11 Hubbel & Hall.
21-30-11 Home Gas Co.
2-19-26 Peckenbaugh, Eureka Oil Co.
1- 3-32 NE, Gurley Oil Co.
24-21-11 SE, Angelus Moning Asso.
6-29- 9 Detroit Oil Corp.
29-29-11 Montezuma Synd.
12-29-13 SW, Shiprock Oil Co.
9-30- 9 Rainbow Oil Co.
36-20-30 Yates, Keyes et al.
11-16-27 SE, Blue Bird Oil Co.
16-13- 9 Melstead No. 2.
25-13-21 SE, Standard Petro. Co.
11-20-29 Rawson, William Dooley.
26-18-18 New Mexico Oil Co.
30-28-11 New Mexico-Milwaukee Synd.
23-18-15 E. M. Treat & Co.
28-18-28 SE, Quillen & Dunnet.
15-12-23 NW, Zeppenfield Co.
16- 1- 7 NE, Ft. Sumner Oil Co.
33-11-35 Tilton & Croft.
23-16-20 Young, Ohio Oil Co.
8-16-27 SE, Irvine et al.
5-22-19 NE, F. A. Black Drlg. Co. 2.
Rigs, 8; wells drilling, 146; total, 154.

EASTERN FIELDS

Summary of Wells Completed

Fields—	Comp.	Prod.	Dry	Gas
Allegany	28	44	0	0
Bradford	149	340	2	2
Middle Field	12	69	1	1
Venango-Clarion	44	72	0	3
Butler-Armstrong	8	12	3	1
S. W. Penna.	14	87	3	3
West Virginia	118	951	30	45
S. E. Ohio	127	1,021	30	21
Totals August	500	2,596	69	76
Totals July	396	2,742	60	63
Difference	104	146	9	13

Summary of Work Under Way

Fields—	Rigs	Drlg.	Total
Allegany	7	36	43
Bradford	21	146	167
Middle Field	2	5	7
Venango-Clarion	2	22	24
Butler-Armstrong	9	16	25
S. W. Penna.	9	48	57
West Virginia	41	151	192
S. E. Ohio	53	136	189
Totals August	144	560	704
Totals July	153	496	649
Difference	9	64	55

WELLS COMPLETED

Allegany Field

Heseltine, Atwood & Stebbins 1
Fee, Empire, Ltd., and Breckenridge 1
Fee, Empire Gas & Fuel, Ltd. 2
Fee, Albert Oil 3
Reid, Agt., Helen Randall 5
Fee, State Bank of Bolivar, No. 28-29 1
Fee, Phillips & Howard 1
Burdick, B. A. Vossler et al 1
Birtcil, W. E. McMurdy et al water
Fee, F. L. Williams 1
Fee, R. J. Dermitt 1
South Penn Oil, A. D. Reeland et al 1
Fee, J. E. LeSuer et al 1
Fee, Charles Phillips 1
Fee, A. C. A. Oil Corp. 1
Fee, Martin Bros. & Sawyer 2
Kinley Oil, W. J. Weller et al 1
Fee, C. H. Lavens et al 5
Tract 1, Hazelwood Oil 42 1
Tract 1, Hazelwood Oil 43 2
Kinley Oil, Stephan & Gallets 1
Carls, H. F. Carls & Sons 1
Fee, W. A. and Mary J. Gerringer 1
Zaph, Sepany Oil 4
F. D. & B., Black & Derby 1
Brandel, N. V. V. Franchot 1
Herrick & Shaner, Davis Oil Corp. 1
Herrick & Shaner, Davis Oil Corp. 1

Wells completed 28
Production 44
Water 1

Bradford Field

Vincent heirs, S. H. Elder et al 18 1
Bing, 326, Andrus & McDowell 71 2
Rew, Bovaird & Hamlin 16 1
Lawton, Gallup, Elder et al 26 5
Bing, 388, C. L. Wann et al 51 1
Bing, 431, J. A. Hooper 6 1
Bing, 391, George W. Bovaird 83 5
Bing, 430, Lane No. 1, et al 71 1
Bing, 373, Howard & McCallum 89 1
Bing, 490, T. H. Kennedy No. 2, 141 1
Bing, 369, D. W. Daly 58 1
Bing, 500, Daly & Healy 31 1
Bing, 490, T. H. Kennedy No. 2, 142 2
Bing, 411, R. M. and James George 28 2
Lee, Hallock & Weston, S. P. O. 94 1
Middaugh, South Penn Oil 48 1
Whipple, South Penn Oil 123 1
Rounds, South Penn Oil 54 2
Hamlin, South Penn Oil 106 1
Jones, South Penn Oil 212 1
Blair, South Penn Oil 52 1
Jones, South Penn Oil 213 1
Kendall, South Penn Oil 56 1
Cotton, South Penn Oil 54 1
Bing, 269, South Penn Oil 26 2
Bing, 439, South Penn Oil 96 2
Culbertson, South Penn Oil 54 1
Rew & Hodge, South Penn Oil 50 1
Bing.-Satt., South Penn Oil 112 1
Smith, South Penn Oil 118 1
Bing, 400 acres, South Penn Oil 69 1
Ware, South Penn Oil 80 1
Smith, South Penn Oil 124 1
Tract 27, Hazelwood Oil 124 1
Tract 25, Hazelwood Oil 13 1
Tract 1, Hazelwood Oil 67 1
Tract 21, Hazelwood Oil 72 1
Tract 21, Hazelwood Oil 73 1
Tract 27, Hazelwood Oil 125 1
Weston Jr., tr., South Penn Oil 94 10
Rounds & Lawrence, S. Penn Oil 56 10
Windsor, Wilson & Co. 13 1
Fee, Forest Oil, Inc., No. 10, 128 10
Hausner et al, Forest Oil, Inc., No. 10, 8 1
Burns et al, Krampf & McCandless 20 1
Redfield et al, South Penn Oil 106 5
Fee, T. H. Givan 12 2
Clugston, Parker Farm Oil 10 2
Fee, L. G. Dana 21 2
Fee, Hooker et al 6 2
Franchot, R. A. Delo & Co. 15 6
Franchot, Maxwell Bros. 17 2
Fee, T. B. Wilson 11 2
Fee, Dana & Dana 43 5
Griffith et al, C. S. Knabb, tr. 3
Fee, C. B. Kervin 1
Fee, South Penn Oil 1
Forest Oil Corp. No. 15, W. P. Brinton 1
Bing., Hazelwood Oil 124 1
Fee, W. C. Kennedy Co. 54 3
Grimm, J. W. Abrams 3 1
Fee, South Penn Oil 41 water
Bing., Hazelwood Oil 125 2
Fee, Hilliard & Dodge 20 1
Brown, W. N. Hunter et al 34 2
Fee, Barry 8 1
Miller, Bouton & Snyder 5 2
Kennedy & Clarke, Phoenix Oil 162 7
Kennedy & Clarke, Phoenix Oil 163 20
Fee, South Penn Oil 187 5
Bing, 188, Harris Oil 33 2
Fee, A. Stover 8
Fee, South Penn Oil 2
Fee, T. H. Kennedy No. 6 2
Fee, T. H. Kennedy No. 6 3
Fee, T. H. Kennedy No. 6 2
Bing, 399, South Penn Oil 1
Bing, 568, Associated Producers 374 3
Bing, 570, South Penn Oil 113 1
Bing, 494, South Penn Oil 54 4
Bing, 501, South Penn Oil 16 2
Bing, 582, Associated Producers 375 3
Hodge, South Penn Oil 2
Sill, Hope Oil 1
Pratt, Petroleum Reclamation 2
Pratt, Petroleum Reclamation 2
Pratt, Petroleum Reclamation 2
Whipple, South Penn Oil 2
Enterprise, South Penn Oil 2
Ekas, Lloyd & Piper 2
Ekas, Lloyd & Piper 3
Ekas, Lloyd & Piper 2
Rew, F. D. Gallup et al 2
Monroe, DeVore et al 1
Fee, W. J. Healy 2
Bingham, H. B. Oil 3
Pratt, Korner Bros. 2
Gormley, Korner Bros. 2
Lovell, Melvin et al 8
Garlock, Denwood Oil 8
Looker, Petroleum Reclamation 2
Germer, Linwood Oil 2
Fisher, Forest Oil 2
Bingham, Barry Bros. 2
Fee, Gridiron Oil 3
Fee, Gridiron Oil 4
Morse, Jos. Minnich Est. 2
Hanes, Coast & Storms 2
Borden, T. P. Thompson 1
Borden, T. P. Thompson dry
Meldrum, Wiborg et al 3
Howard, Pressure Oil 3
Borden, C. E. Piper 5
Borden, T. B. Wilson 2
Mott, Reclamation Oil 2
Mott, Reclamation Oil 2
Baldwin, C. B. Kervin 1
Keating, Sloan & Zook 1
Keating, Sloan & Zook 3
Russell, Potter & Devore 2
Burns, A. J. Douglas et al 1
Baldwin, Forest Oil 2
Porter, Forest Oil 3
Porter, Forest Oil 2
Shenfield, W. J. Fredericks 3
Marvin, A. L. & L. M. Lilly 2
Borden, T. B. Martin 2
Borden, John Franks 2
Sanderson, A. Schorman 2
Keller, Hiffler & Sprague 2
Duke, M. B. Oil (12 wells) 15
Duke, M. B. Oil 2 dry
Lingham, J. L. Yerdon 1
Bingham, Paul Evans et al 4
Wright, Wright & Johnson 1
Bingham, H. E. Camp Est. 2
Emerson, G. L. Rhodes et al 2
Middaugh, South Penn Oil 1
Whipple, South Penn Oil 1
Jones, South Penn Oil 1
Jones, South Penn Oil 1
Kendall, South Penn Oil 1
Cotton, South Penn Oil 1
Rew & Hodge, South Penn Oil 1
Tract 25, Hazelwood Oil 1
Tract 1, Hazelwood Oil 1
Tract 13, T. H. Kennedy 3
Corwin, Cora M. Simon 1
Duke & Taggart, Staley & Thomas 3
Borden fee, T. P. Thompson Jr. water

Wells completed 149
Production 340
Dry 2
Water 2

Middle Field

Kapp, S. E. Kapp 2
Lot 3767, F. J. Moser 31 1
Lot 385, Kane Oil 43 1
Giltinan, T. J. Giltinan 1
Knopf, Knopf & Chapman 1
Grandin, J. L. Maitland 1
Siggins, H. A. Siggins dry
Irvine, Hague & Co. 45 1
Dennis, R. L. Thomas 11 1
Osten, Rembold & Co. 7 10
King, E. Pequignot 14 gas
Churnlot, C. R. Moore 13 50

Wells completed 12
Production 69
Dry 1
Gas 1

Venango-Clarion

Foster, H. C. Foster 58 1
McNellie, Midland Oil 20 1
Fisher, F. S. Gates 13 1
Myers, Grove Main et al 16 1
Breed, O'Ball Oil 20 1
Breed, O'Ball Oil 41 1
Fulmer, Andrews et al 15 1
Rice, Jacob Sheasley 6 1
Rice, Jacob Sheasley 7 1
Rice, Jacob Sheasley 8 1
Emery, Berry & McCray 7 1
Emery, Berry & McCray 8 1
Bowman, National Petroleum 11 1
Moses, S. P. McCalmont Est. 7 1
P. C. & H. Co., Pyle, Price et al 67 1
Foster Faim Oil, Jenkins & Grimm 15 1
Foster Faim Oil, Jenkins & Grimm 16 1
Dundas, Culbertson Bros. 17 1
Dundas, Culbertson Bros. 18 1
Tingley, Williams & Cobb 4 2
Craig, Hoffman et al, Mrs. J. Myers 14 1
Adams, Jones, Greene & Adams 14 1
Frampton O. & L. Oil City Natl. Bk. 12 1
McCalmont, J. H. Hogg 12 1
Freidhaber, Parsons & McIntyre 19 1
Seaton, C. W. Seaton 25 2
McCalmont, Peoples National Bank and Williams 10 1
Friggle, Friggle Bros. 61 1
Siggins, Sarah A. Lytle 28 2
Tarr, Bankson Bros. 19 1
Sutley, Dodds & Arthurs 24 1
Blood, J. S. Wallace 15 2
Bowers, J. P., B. E. & F. H. Bowers 46 1
Clarion—
Ditz, United Natural Gas 3750 gas
Carl, S. R. Lewis et al 1 gas
Corbett & Vowinkel, H. W. Wilson 1 gas
Heeter, Master & Hess 8 1
Garis, Alum Rock Gas 6 2
Buck, Vasey, Vensel et al 4 2
Wolbert, Wilson & Co. 1 1
Crawford—
O'Dell, Wilson & Kerr 1 5
Hood, Mead & Hood 18 10
Prather, Nutting, Kay & Thatcher 24 6
Cozy Oil, Rumbolt 10 8

Wells completed 44
Production 72
Dry 3

Butler-Armstrong

Peters, Charles Devlin 1 dry
McBride, Patrick McBride & Co. 4 dry
Bryan, Armstrong & Ruby 6 1
McGill, M. Garvin et al 2 dry
Fleming, T. W. Phillips G. & O. gas
McGarvey, Sherwin McGarvey et al 2 4
Stewart & Co., Stewart & Co. 4 2
Griffith, E. C. Griffith 5

Wells cmpoleted 8
Production 12
Dry 3
Gas 1

ALLEGANY FIELD

Rigs

Fee, Empire Ltd. and Breckenridge.
Fee, Empire Gas & Fuel, Ltd.
Fee, Empire Gas & Fuel, Ltd.
Fee, Albert Oil.
Fee, F. L. Williams.
Fee, L. W. Shaner et al.
Fee, Rehler Bros.

Wells Drilling

Fee, Empire Gas & Fuel, Ltd.
Fee, Albert Oil.
Fee, Hill & Son.
Reid, Agt., Helen Randall.
South Penn Oil, A. D. Reeland et al.
Fee, Citizens Natl. Bank of Wellsville 162.
Fee, G. W. and Phoebe Birtcil.
Birtcil, W. E., McMurdy et al.
Fee, J. W. Johnson et al.
Fee, Isaac Willets estate.
Fee, J. E. LeSuer et al.
Boyce et al, Jennings et al.
Kass, F. J. Wilson.
Perkins, W. H. Lobaugh, Tr.
Congdon, Firt Natl. Bank of Cuba.
Tract 1, Hazelwood Oil 55.
Brandel, N. V. V. Franchot.
Fee, N. V. V. Franchot.
Fee, Andrews Oil.
Kurtzhaltz, E. G. & F. W. Stephan.
Zaph-Fee, Sepany Oil.
Fee, Miller & Bovaird.
Lippert, C. M. Lippert et al.
Waterst estate, Ray Waters et al.
Ryan, M. Shear.
McCaffery & Westran, Mrs. H. S. Westran.
McCafferty, McCafferty and Firt National Bank of Allegany.
Brown et al, Polley Bros.
Fee, C. L. McGavern.
Carls, H. F. Carls & Sons.
Fee, George H. Zink.
McGuire, M. J. Hall et al.
Fee, Rehler Bros.
F. D. & B., Black & Derby.
F. D. & B., James G. Paul et al.
Chipmonk Land, South Penn Oil.
Rigs, 7; wells drilling, 36; total, 43.

BRADFORD FIELD

Rigs

Bing, 391, George W. Bovaird 84.
Bing, 428, J. A. Hooper 8.
Fee, Forest Oil, Inc., No. 10, 1A26, 1A1.
Fee, M. Hungiville 25.
Fee, T. H. Givan 13.
Clugston et al, Parker Farm Oil 11.
Fee, E. L. and F. J. Shippey 6.
Fee, F. M. Johnston & Son 23.
Franchot, E. L. Maxwell et al 15.
South Penn Oil, John Jackson Jr. 16.
Bing, 150, South Penn Oil 71.
Fee, W. C. Kennedy Co. 55.
Kennedy & Clarke, Phoenix Oil 165.
Bing, 188, Harris Oil 34.
Fee, Hilltop Oil 36.
Bing, 594, South Penn Oil 55.
Bing, 494, South Penn Oil 56.
Bing, 533, South Penn Oil 115.
Bing, 501, South Penn Oil 17.
Bing, 582, Associated Producers 377.

Wells Drilling

Bing, 497, Park & Bovaird 38.
Bing, 369, D. W. Daly 59.
Bing, 490, T. H. Kennedy No. 2, 143.
Moore, Pure Penn Oil 11.
Rew, Bovaird & Hamlin 17.
Bing, 389, D. W. Daly 44.
Bing, 388, C. L. Wann et al 52.
Bing, 491, J. E. Ward 16.
Rew, Bovaird & Hamlin 31.
Middaugh, South Penn Oil 49.
Lee, Hallock & Weston, South Penn Oil 95.
Taylor, South Penn Oil 37.
Davis, South Penn Oil 26.

Whipple, South Penn Oil 124.
Rounds, South Penn Oil 55.
Rumsey, South Oil 129.
Bing, 151-154, South Penn Oil 31.
Dent, South Penn Oil 104.
Hamlin, South Penn Oil 107.
Jones, South Penn Oil 214.
Moody 54, South Penn Oil 41.
Bing, 423, South Penn Oil 14.
Smith, South Penn Oil 125.
Bing-Satt., South Penn Oil 114.
Bing, 400 acres, South Penn Oil 70, 72.
Kinzua, South Penn Oil 188.
Smith, South Penn Oil 123.
Bing, 212, South Penn Oil 39.
Bing, 533, South Penn Oil 84.
Culbertson, South Penn Oil 55.
Cotton, South Penn Oil 55.
Bing, 501, South Penn Oil 17.
Bing, 439, South Penn Oil 97.
Smith, South Penn Oil 126.
Bing, 400 acres, South Penn Oil 71.
Moody, 66, South Penn Oil 92.
Bing, 369, South Penn Oil 27.
Tract 23, Hazelwood Oil 93.
Tract 25, Hazelwood Oil 14.
Tract 27, Hazelwood Oil 126.
Weston, Jr., tr., South Penn Oil 95.
Rounds & Lawrence, South Penn Oil 57.
Fee, Forest Oil ,Inc., No. 10, 124.
Fee, Forest Oil, Inc., No. 10, 131.
Fee, Forest Oil, Inc., No. 10, 1A19.
Fee, M. C. Roat 6.
Burns et al, Krampf & McCandless 22.
Burns et al, Bliss Oil 31.
Fee, E. L. and F. J. Shippey (res.) 11.
Fee, Hazelwood Oil 47.
Fee, Hooker et al 7.
Franchot, F. M. Johnston & Son 26.
Franchot, Thomas P. Fox 14.
Franchot, H. and J. G. Shannon 12.
Franchot, R. A. Delo & Co. 16.
Franchot, Maxwell Bros. 18.
Fee, Dana & Dana 44.
Fee, George W. Crooks Est. 15.
Fee, South Penn Oil.
Fee, C. B. Kervin.
Fee, South Penn Oil.
Bing, 150, South Penn Oil 69, 70, 72.
Fee, South Penn Oil 35.
Fee, Kaber & Coulter 41.
Fee, Barry.
Bing, 156, South Penn Oil.
Fee, South Penn Oil.
Hedlund, Diament & Co. 1.
Fee, South Penn Oil 188.
South Penn Oil, E. K. Kane 44.
Fee, A. Stover.
Bing, 398, South Penn Oil.
Fee, T. H. Kennedy No. 6.
Bing, 533, South Penn Oil 84.
Bing-Satt, 576, South Penn Oil 114.
Bing, 582, Associated Producers 376.
Hodge, South Penn Oil.
Sill, Hope Oil.
Pratt, Petroleum Reclamation (2 wells.)
Whipple, South Penn Oil.
Enterprise, South Penn Oil.
Ekas, Lloyd & Piper (3 wells.)
Rew, F. D. Gallup et al (2 wells.)
Monroe, Devore et al.
Fee, W. J. Healy.
Bingham, H. B. Oil.
Pratt, Korner Bros.
Lovell, Meldrum et al (2 wells.)
Garlock, Denewood Oil.
Looker, Petroleum Reclamation.
Murphy, Wilson et al.
Germer, Linwood Oil.
Bingham, Barry Bros.
Jack, Howard Jack et al.
Campbell, Miller et al.
Fee, Webb Est.
Corwin, Simon Bros.
Duke, M. B. Oil (12 wells.)
Morse, Jos. Minnich Est.
Meldrum, Wiborg et al.
Borden, T. B. Wilson.
Mott, Reclamation Oil (3 wells.)
Baldwin, C. B. Kervin.
Keating, Sloan & Zook (2 wells.)
Borden, A. J. Douglas et al.
Middaugh, South Penn Oil.
Whipple, South Penn Oil.
Jones, South Penn Oil.
Cotton, South Penn Oil.
Bingham, 212, South Penn Oil.
Tract 25, Hazelwood Oil.
Borden fee, T. P. Thompson Jr.
Marvin, A. L. and L. M. Lilly.
Middaugh, A. L. and L. M. Lilly (2 wells.)
Irvine, C. E. Potter.
Wommer, Patton & Wilson.
Borden, T. B. Martin.
Wright, Cotton & Moore.
Wright, W. D. Wright et al.
Emerson, G. L. Rhodes et al.
Bingham, H. E. Camp Est.
Bingham, Paul Evans et al.
Bingham, J. L. Yerdon.
Rigs, 21; wells drilling, 146; total, 167.

MIDDLE FIELD
Rigs
T. & W., A. E. and W. C. Tompsett 77.
Brennan, E. Pequignot 1.
Wells Drilling
Lot 3767, F. J. Moser 32.
Lot 269, Pennsylvania Gas 946.
Johnson, Johnson Bros.
Meyers, J. L. Billstone.
Ulf, Fidelity Petroleum 1.
Rigs, 2; wells drilling, 5; total, 7.

VENANGO-CLARION
Rigs
Baum, J. P. Mansfield 9.
Siggins, Sarah A. Lytle 29.
Wells Drilling
Kimes, Cross, Smiley et al 28.
McNellie, Midland Oil 21.
Clark, Clark & Mong 1.
Fisher heirs, T. G and H. S. Phinny 1.
Bowman, National Petroleum 12.
Crawford, Crawford, Gregory, Woodburn account & Co., 79.
Frampton O. & L., Oil City Natl. Bk. 13.
McKinley, Bard & Uher et al 24.
Atwell, Hoffman, Craig et al 31.
Plumer, Eakin & Hutchinson 45.
Knapp, Knapp Bros. 2.
Shawkey, Alum Rock Gas 2.
Omega, W. D. Crawford 4.
Hood, Moyar & McComb 62.
Sutley, Dodds & Arthurs 25.
Clarion—
Kahle, A. D. Shorts et al 4.
Schotenburg, Hess & Crawford 1.
O'Neill Bros., D. & H. O'Neill 8.
Wentling, H. E. Rugh 4.
Stewart, Neely & Clover 4.
McCleary, C. P. McCleary 3.
Gabler, Gatesman & Co. 1.
Rigs, 2; wells drilling, 22; total, 24.

BUTLER-ARMSTRONG
Rigs
Neel, Dufford, Vensel et al 2.
Peters, L. D. Berry 1.
McCollough, J. M. McCullough & Sons 1.
Shroup, Charles Hilderbrand 5.
Oesterling, M. Waltman et al 1.
Kramer, Southern Oil 6.
Paige, T. W., Phillips Gas & Oil 1.
Boggs heirs, R. C. & W. V. Binkerd.
Morgan, I. N. Johns.
Wells Drilling
Kriess heirs, J. E. Dufford et al 1.
Wagner heirs, E. C. Hatcher et al 3.
Hoffman, Jewell & Co. 3.
Lentz, Battenfelder & Co. 1.
Seiders, Battenfelder & Co. 1.
Shaner & Beilstein, Shaner & Co. 4.
Holben, Ritzert Bros. & Co. 1.
Daubenspeck, Theodore Scott 3.
Oesterling, Roy Embrie et al 1.
McCullough, M. B. Flinnessy 5.
Trees, J. C. Trees 2.
Worley, J. A. Elliott et al 4.
Lutz, C. C. Campbell et al 4.
Wick Est., Chambers Oil.
Stewart & Co., Stewart & Co. 3.
Anderson, Crawford & Gregory 4.
Rigs, 4; wells drilling, 16; total, 25.

WEST VIRGINIA
WELLS COMPLETED
LEWIS COUNTY
Davisson, Mud Lick O. & G. Co. 1 ..... gas
Williams, Conservative Oil Co. 3 ..... gas
HARRISON COUNTY
Shepler, Vesper O. & G. Co. 1 ..... dry
Stone, Hope Gas Co. 1 ..... gas
MARION COUNTY
Toothman, Owens B. & M. Co. 1 3
Thorn, Owens B. & M. Co. 2 ..... gas
Snyder, Clifton O. & G. Co. 3 25
MONONGALIA COUNTY
Tennant, Pa. & W. Va. G. Co. 1 ..... dry
White heirs, Mfrs. L. & H. Co. 4 ..... gas
WETZEL AND TYLER COUNTIES
Riter, Hope C. & R. Co. 6 30
Wade, Carnegie Gas Co. 1 ..... dry
Kimble, Kimble O. & G. Co. 1 ..... gas
Stump, Mfrs. L. & H. Co. 3 ..... dry
Sough, Pure Oil Co. 3 ..... gas
Tuttle, Hope C. & R. Co. 7 ..... dry
Parker, Sugar Camp O. & G. Co. 4 1
Gale heirs, Samuel & Gale 12 1
MARSHALL COUNTY
Keller, Mfrs. L. & H. Co. 7 ..... gas
Yeater, Hope C. & R. Co. 1 1
Teagarden, Mfrs. L. & H. Co. 2 ..... gas
DODDRIDGE COUNTY
Stuttler, W. D. Gribble 1 ..... dry
Pitts. Amer. Oil Dev. Co. 15 ..... dry
Perin, J. H. Trainer 1 ..... gas
Pratt & Co., Bell O. & G. Co. 1 5
Smith, Hope Gas Co. 2 ..... dry
Spencer Clifton O. & G. Co. 1 ..... gas
Smith, Trainer & ..... 1 ..... dry
RITCHIE COUNTY
Prunty, Cain Run O. & G. 4 5
Wilson, Spencer O. & G. Co. 2 ..... gas
Erhart, Hope Gas Co. 4 ..... gas
Nutter, Hope Gas Co. 1 ..... gas
Howell, Moore & Co. 1 5
Valentine, Hope C. & R. Co. 1 ..... dry
Harrington, Hope C. & R. Co. 1 ..... dry
Bowie heirs, Meadow Farm O. Co. 2 .. 40
Jamison, So. P. Oil Co. 2 15
Jamison, So. P. Oil Co. 3 25
Mitchell, Rinehart & Co. 3 90
Dawson, Dawson Farm O. Co. 2 90
Metts heirs, John Starcher 1 50
Atkinson lot, Rinehart & Co. 2 80
Atkinson lot, So. P. O. Co. 7 85
Atkinson lot, So. P. O. Co. 8 25
Hardwick, Hardwick Farm O. Co. 2 .... dry
GILMER COUNTY
Fling, A. E. Ellis 2 ..... dry
WIRT COUNTY
Dewees heirs, Southern Oil Co. 1 ..... gas
BRAXTON COUNTY
Miller & Co., Ohio Fuel Gas Co. 1 ..... dry
Snodgrass, Mill Fork O. & G. Co. 1 ..... gas
Beard, Ohio F. G. Co. 1 ..... dry
UPSHUR COUNTY
Davisson, Mud Lick O. & G. Co. 1 ..... gas
Willfong, Edgell O. & G. Co. 1 ..... gas
WOOD COUNTY
Henry, Reed & Co. 4 1
McAtee, O. E. Grow 10 15
Young, Henderson Oil Co. 3 5
Drain heirs, Henderson Oil Co. 14 .... dry
Lauer, Hoaglan Oil Co. 7 5
Wharton, So. P. O. Co. 4 1
Brum, Jonas & Park O. Co. 1 ..... dry
Grant heirs, So. P. O. Co. 4 ..... dry
PLEASANTS COUNTY
DeLong, DeLong Farm O. & G. Co. 3... 3
ROANE COUNTY
Summers, Clifton O. & G. Co. 3 2
Burrough, Heck Oil Co. 4 ..... dry
Brown, Ohio F. O. Co. 2 4
Adams, Douglass Bros. 2 ..... gas
Harless, G. L. Cabot 2 ..... gas
CALHOUN COUNTY
Beard, Euclid O. & G. Co. 3 ..... gas
Stalnaker, Phila. Oil Co. 1 ..... dry
J. Stalnaker, C. W. McCall & Co. 1 ... dry
D. Stalnaker, Phila. Oil Co. 4 ..... dry
D. Stalnaker, Phila. Oil Co. 5 ..... dry
Stump heirs, Bickle & Co. 7 ..... dry
CLAY COUNTY
Steely, So. P. O. Co. 26 5
Steely, So. P. O. Co. 27 20
Steely, So. P. O. Co. 28 30
Steely, So. P. O. Co. 29 40
Steely, So. P. O. Co. 30 10
Steely, So. P. O. Co. 31 25
Klye, So. P. O. Co. 8 7
Kyle, So. P. O. Co. 9 2
Kyle, So. P. O. Co. 10 5
Casto 260 acres, Virginian G. & O. Co. 13 45
Brown, Swan & Goshorn, Virginia G. & O. Co. 11 25
Brown, Swan & Goshorn, Virginian G. & O. Co. 14 10
Brown, Swan & Goshorn, Virginian G. & O. Co. 1 40
Kreen, Elkins O. & G. Co. 4 ..... gas
Osborne, Empire Pet. Co. 2 ..... gas
Samples, Eastern Mfrs. H. Co. 2 ..... gas
KANAWHA COUNTY
Pike heirs, Tampico O. & F. Co. 8 ..... dry
Fogerty, U. F. G. Co. 1 ..... dry
Osborne, U. F. G. Co. 5 ..... gas
Weeds, U. F. G. Co. 1 ..... gas
King, U. F. G. Co. 1 ..... gas
Cobb, U. F. G. Co. 2 ..... gas
Young, U. F. G. Co. 1 ..... gas
Hunt, Empire Pet. Co. 2 ..... gas
BOONE COUNTY
Goldbarth, So. P. O. Co. 1 ..... gas
Bedford heirs, U. F. G. Co. 11 ..... gas
Williams Coal Co., Pure Oil Co. 227.... 45
Wilson, Pure Oil Co. 1 ..... gas
Fed. C .& L. Co., Pure Oil Co. 10 ..... dry
Williams Coal Co., Pure Oil Co. 226 25
Cassingham & Co., Hope Gas Co. 1 .... dry
Peyton, Owens B. & M. Co. 9 ..... dry
Coal R. M. Co., Owens B. & M. 1 ..... gas
Thompson, G. L. Cabot 1 ..... gas
Nelson Land Co., Pond Fork O. & G. Co. 3 ..... gas
Meadows, Halstead & Co. 1 ..... gas
Coon, Hickman Prod. Co. 2 ..... gas
Banks, Ira G. Sayer 1 ..... gas
LOGAN COUNTY
Guyan Mercantile Co., Wockatock O. & G. Co. 2 ..... dry
PUTNAM COUNTY
Sanders, Kirtley & Keller 1 ..... gas
School lot, Thompson, Shannon & Co. 1 dry
CABELL COUNTY
Reynolds, Aetna O. & G. Co. 1 ..... gas
Harshbarger, Harshbarger O. & G. Co. 1 gas
Finley, Monickel Gas Co. 1 ..... gas
Browning, Wolf & Co. 1 ..... gas
WAYNE COUNTY
McGee, Chartiers Oil Co. 1 2

Wells Completed	118
Production	951
Dry	30
Gas	45

LEWIS COUNTY
Rigs
Parsonage lot, Frey & Co. 1.
Brown, Tomahawk O. & G. Co. 1.
Wells Drilling
Bramer, Phila. Gas Co. 1.
Clark, West Fork O. & G. Co. 1.
HARRISON COUNTY
Rigs
Bramer, Clks. L. & H. Co. 2.
Wells Drilling
Rogers, Hoffmier & Deegan 2.
Williams, Johnson & Co. 2.
Hudson heirs, G. L. Cabot 1.
Westfall, J. W. Johnston 1.
Williams, Clinton Oil Co. 4.
Cunningham, H. C. & R. Co. 5.
Smith Bros., Reserve Gas Co. 1.
Fitrow, S. C. Horner 1.
Davisson, Vesper O. & G. Co. 1.
Sheffler, Vesper O. & G. Co. 1.
Payne, Hope Gas Co. 1.
Morrison, Hope C. & R. Co. 1.
MARION COUNTY
Wells Drilling
Amos, Hope Gas Co. 1.
Haught, Carnegie Gas Co. 1.
Snyder, Owens B. & M. Co. 1.
Moore, Phila. Gas Co. 1.
Hibbs, S. N. Elliott 3.
Thorn, Carnegie Gas Co. 1.
MONONGALIA COUNTY
Rigs
White, Clovis & Co. 1.
Wells Drilling
Bell, Pgh. & W. Va. Gas Co. 2.
Hennen, Mfrs. L. & H. Co. 1.
Eakin, Pgh. & W. Va. G. Co. 1.
Wright, Carnegie Gas Co. 1.
Shuman, Carnegie Gas Co. 3.
WETZEL AND TYLER COUNTIES
Rigs
Morgan, Carr Bros. 1.
Stump, Mfrs. L. & H. Co. 2.
Hostettler, Carnegie Gas Co. 2.
Six, Six O. & G. Trust 1.
McGinnis, H. L. Lambert 8.
Wells Drilling
Antil, Johns Gas Co. 7.
Fox, Mfrs. L. & H. Co. 1.
Wade, Carnegie Gas Co. 3.
Jellliffe, Phila. Oil Co. 2.
Anderson, Carnegie Gas Co. 2.
MARSHALL COUNTY
Rigs
Campbell, Conway & Co. 1.
Jochum, Spider O. & G. Co. 1.
Wells Drilling
Calvert, Mfrs. L. & H. Co. 1.
McCluskey heirs, Waynesburg Gas Co. 2.
Marison, Burgess & Co. 1.
Newman, Wood & Co. 1.
Thomas heirs, Mfrs. L. & H. Co. 3.
Howard heirs, G. B. Patterson 2.
Baker, Decem Dev. Co. 1.
HANCOCK COUNTY
Wells Drilling
Herron, F. L. Freshwater 5.
DODDRIDGE COUNTY
Rigs
Eddy, McIntyre Oil Co. 1.
Yeater heirs, Mfrs. L. & H. Co. 2.
Smith, Eastern Union Gas Co. 1.
Ahouse, Mfrs. L. & H. Co. 1.
Smith, Hope C. & R. Co. 6.
Wells Drilling
Ford, Buckeye O. & G. Co. 1.
Ross, Trainer & Travis 1.
Robinson, G. B. Travis 1.
Noble, Trainer & Travis 1.
George heirs, Baker Oil Co. 1.
Coleman, Murphy Oil Co. 1.
RITCHIE COUNTY
Rigs
Leggett, Pgh. & W. Va. Gas Co. 2.
Camden, Hope Gas Co. 1.
W. Va. Tract, Whitewood O. Co. 29.
W. Va. Tract, Romeo G. Wiles 6.
Lemon, Victor Pet. Co. 12.
Wells Drilling
M. E. Church lot, Beckerstaff 1.
Hall, Auburn Oil Co. 2.
Batson, Carnegie Gas Co. 2.
Beck, Carnegie Gas Co. 1.
Prunty, Zinn & Co. 1.
Bruffey, Taylor & Co. 1.
Dodson, Nay & Kentzer 1.
McCosh heirs, Wilson & Co. 1.
Miller heirs, Hope Gas Co. 3.
Nolan, Waldschmidt & Co. 1.
Ingram, Fisher Oil Co. 2.
Morris, Aetna O. & G. Co. 2.
Howell, Moore & Co. 1.
Hickman heirs, Roberts, Sr., & Co. 1.
White, Maxwell & Co. 4.
Anderson, Big Sand O. Co. 2.
Volcanic Tract, Power Oil Co. 111.
Rex, Roberts Oil Co. 2.
Templeton, Swingle Oil Co. 1.
Mitchell, Rinehart & Co. 3.
Bradford, Rico O. & G. Co. 3.
Maze, Amer. Dev. Co. 3.
Lowther, Oakdale O. & G. Co. 10.
Payne, Snider Bros. O. Co. 2.
GILMER COUNTY
Rigs
Tierney, James Tierney 3.
Wells Drilling
Bartlett, Phila. Oil Co. 1.
WIRT COUNTY
Wells Drilling
Roberts, Pell & Newman, Federal O. & G. Co. 34.
Rathbone Oil Tract, Roberts Bros. 147.
BRAXTON COUNTY
Rigs
Dobbins, Pgh. & W. Va. Gas Co. 1.
Wells Drilling
McCree, Pgh. & W. Va. Gas Co. 1.
Engle, J. H. Gaines 1.
WOOD COUNTY
Rigs
McAtee, Becker & Smith 3.
Scott, So. P. O. Co. 1.
Wharton, So. P. O. Co. 5.
Albright, So. P. O. Co. 8.
Moore, Four S. Oil Co. 1.
Wells Drilling
Dowling, Mixer & Co. 1.
Ralston, A. E. Sweeny 1.
PLEASANTS COUNTY
Wells Drilling
Colvin, Big Bend Oil Co. 1.
Northcroft, Tyler Oil Co. 1.
Hendrix, N. Y. Pet. Co. 5.
Reynolds, Bradford Supply Co. 1.
Gardner heirs, White & Co. 1.
ROANE COUNTY
Wells Drilling
Davis, Green Creek O. & G. Co. 1.
Warren, Heck Oil Co. 3.
Elliott, Ohio F. O. Co. 1.
CALHOUN COUNTY
Rigs
Richards, Chemical O. & G. Co. 1.
Wells Drilling
Wolverton, W. H. Bickle 2.
Ferrell, G. L. Cabot 6.
Parsons, Hope C. & R. Co. 2.
Ward, G. L. Cabot 1.
Forry, Kingsbury & Co. 1.
CLAY COUNTY
Rigs
Stockly, So. P. O. Co. 25, 37, 38, 39, 40.
Casto, Virginian Gasoline & Oil Co. 14.
Brown, Swan & Co., Virginian Gasoline & Oil Co. 1.
Lockhart, Virginian Gasoline & Oil Co. 2.
Wells Drilling
Stockly, So. P. O. Co. 24, 32, 33, 34, 35, 36.
Belcher, So. P. O. Co. 3, 9, 10.
Parker, So. P. O. Co. 2, 3.
Hicks, So. P. O. Co. 1.
Casto, Ohio Fuel O. Co. 12, 13, 14.
Reed, Ohio F. O. Co. 2.
Brown, Swan & Co., Ohio F. O. Co. 16.
Lockhart, Ohio F. O. Co. 1.
School lot, Morley O. & G. Co. 1.
Smith, Elkins O. & G. Co. 1.
Samples, Chalmers O. & G. Co. 2.
LINCOLN COUNTY
Wells Drilling
Egner, Col. G. & E. Co. 1.
Chambers, Col. G. & E. Co. 1.
Lawson, Laurel Dev. Co. 2.
Bickers, Grant Gas Co. 1.
KANAWHA COUNTY
Rigs
White, Snyder & Co. 1.
Shamblin, Rigs G. Co. 1.
Wells Drilling
Wood, U. F. G. Co. 1.
Mullin, U. F. G. Co. 1.
Wehrle, U. F. G. Co. 1.
Taylor, U. F. G. Co. 1.
Smith heirs, U. F. G. Co. 1.
Bird, United Carbon Co. 4.
BOONE COUNTY
Wells Drilling
L. R. & P. Tract, Pure Oil Co. 26.
Coon, Pure Oil Co. 1, 4.
Bone, Pure Oil Co. 1.
Williams Coal Co., Pure Oil Co. 229, 228.
L. R. & P., Pure Oil Co. 22.
Cassingham & Co., Owens B. & M. Co. 11.
Little Coal Land Co., Owens B. & M. Co. 4.
Anderson, Owens B. & M. Co. 1.
Linville, Owens B. & M. Co. 2.
Petonis C. & L. Co., Owens B. & M. Co. 10.
Laurel Creek F. Co., G. L. Cabot 1.
Lewis, G. L. Cabot 1.
Nelson Land Co., G. L. Cabot 4.
White, Hopkins & Co., Halstead & Co. 1.
Dingess Run C. Co., Wockotock O. & G. Co. 13, 14.
Yawkey-Freeman C. D., Wockotock O. & G. Co. 2.
Cole-Crane, Hope Gas Co. 3.
Cole-Crane, Zonheimer & Gibbs 1.
PUTNAM COUNTY
Wells Drilling
Chapman, Ellis & Adkins 1.
CABELL COUNTY
Rigs
Beckett, Harshbarger O. & G. Co. 10.
Wells Drilling
Chaney, Aetna C. & G. Co. 2.
Weatherholt, Farr & Figley 1.
MINGO COUNTY
Rigs
Logan Cannel Coal Co., Old Colony Oil C. 18.
Wells Drilling
Logan Cannel Coal Co., Old Colony Oil Co. 17.
Costerman estate, Oild Colony Oil C.o 12.
Rigs, 41; wells drilling, 151; total, 192.

SOUTHWEST PENNSYLVANIA
WELLS COMPLETED
WASHINGTON COUNTY
Cowden, Cowden O. & G. 46
ALLEGHENY COUNTY
Ferguson, Ferguson & Son 1 2
Dean, Pinkerton & Newhart 1 4
Kirsh, Mellon & Pollock 1 4
BEAVER COUNTY
Baker, Schuck & Co. 1 ..... dry
Casely, Robinson & Brother 1 ..... dry
Dawson, Dawson & Co. 3 1
GREENE COUNTY
Lemley heirs, Fox O. & G. Co. 1 1
Fox, Phila. Gas Co. 1 ..... gas
Muriner, Peoples Gas Co. 1 ..... gas
Cottil, Phila. Oil Co. 2 5
Cottil, Phila. Oil Co. 3 30
Stockdale, Mfrs. L. & H. Co. 1 ..... gas
Scott, Carnegie Gas Co. 3 ..... dry

Wells completed	14
Production	87
Dry	3
Gas	4

WASHINGTON COUNTY
Martin, E. E. Robertson 1.
Andrews, Mfrs. L. & H. Co. 1.
Weir, Carnegie Gas Co. 1.
Taylor, Carnegie Gas Co. 1.
Shaffer, Dillmyer 1.
Dowler, Peoples Gas Co. 1.
Pittsburgh G. Co., Stock Co. 1.
ALLEGHENY COUNTY
Wells Drilling
Elliott, Elliott 2.
Thornburg, McDermott & Co. 1.
Link, Link & Co. 1.

BEAVER COUNTY
Wells Drilling
Miller, Ralph Steb 1.
Washington, Bruin Prod. Co. 2.
Tuttle, Reed & Co. 1.
GREENE COUNTY
Rigs
Headley, So. P. O. Co. 3.
Kriger, Carnegie Gas Co. 1.
Lemley, Carnegie Gas Co. 2.
L. Lemley, Martin O. & G. Co. 1.
Caseman, Caseman O. & G. Co. 1.
Walters, Mfrs. L. & H. Co. 1.
Anderson, Consumers Fuel Co. 3.
Powers, Consumers Fuel Co. 1.
Rutan, Carnegie Gas Co. 4.
Wells Drilling
Neill, Carnegie Gas Co. 1.
Wade, Carnegie Gas Co. 2.
Lance heirs, Carnegie Gas Co. 1.
Cumberland Coal Co., Carnegie Gas Co. 1.
Williamson, Phila. Gas Co. 1.
Lemley, Peoples Gas Co. 1.
Henderson, Federated O. & G. Co. 1.
Vance, Dunkard O. & G. Co. 1.
Williamson, George Vance 1.
Clovis heirs, Mfrs. L. & H. Co. 4.
Clovis, Roy Clovis & Co. 2.
Smith, Eddy & Co. 1.
Main, Covert Brothers 1.
Webster, N. G. Co. of W. Va. 1.
Smith & Co., N. G. Co. of W. Va. 1.
Chess, McCracken & Co. 1.
Carson, Carnegie Gas Co. 2.
Berdine, Dunn-Mar O. & G. Co. 3.
Moore, Phila. Oil Co. 1.
Graham, Phila. Oil Co. 1.
Huffman, Phila. Oil Co. 2.
Jacobs & Co., Phila. Oil Co. 7.
Anderson, Consumers Fuel Co. 2.
Rutan, Consumers Fuel Co. 2.
J. S. Rutan, Consumers Fuel Co. 2.
Shape, Carnegie Gas Co. 1.
Reese, Carnegie Gas Co. 1.
J. S. Rutan, Carnegie Gas Co. 3.
Tripp, Carnegie Gas Co. 1.
Baldwin, Carnegie Gas Co. 1.
T. F. Rutan, N. G. Co. of W. Va. 5, 6, 7.
Tripp, Leonard Black & Co. 2.
Reese, Elliott, Moore & Co. 1.
Rigs, 9; wells drilling, 48; total, 57.

SOUTHEAST OHIO
WELLS COMPLETED
MONROE COUNTY

Smith, Whitten Oil Co. 1	1
Haught, H. A. Hendershot 5	2
Bode, Timblin & Co. 11	2
Heddleson, California Prod. Co. 1	2
Daugherty, Brown & Co. 2	2
PERRY COUNTY	
Roberts, Kelly Bros. & Co. 24	2
Butts, Leonard O. & G. Co. 1	10
Allen, Leonard O. & G. Co. 1	10
Thomas, Pure Oil Co. 1	dry
HOCKING COUNTY	
Meldrim, Gordon Oil Co. 2	5
Stone, Gordon Oil Co. 8	45
Kitchen, Gordon Oil Co. 2	10
Pierpoint, Pierpoint & Co. 3	5
Tracey estate, Kachelmacher estate 22	40
Wolfe, Chartiers Oil Co. 3	2
Guess, Duncan & Co. 3	dry
Reedy, Central O. & G. Co. 1	dry
H. V. P. Co., Chartiers Oil Co. 200	110
Hazelton heirs, Big Ten O. & G. Co. 3	30
Crawford, Martin Oil Co. 1	dry
HOLMES COUNTY	
East Ohio Gas Co. 1	dry
Middaugh, East Ohio Gas Co. 1	5
Snow, Kenrow Co. 1	gas
Miller, Ark. Fuel O. Co. 3	10
Steele, Empire G. & F. Co. 1	gas
Uhl, Pure Oil Co. 1	4
Close, Pure Oil Co. 3	75
Anderson, East Ohio Gas Co. 1	25
Marquis, Pure Oil Co. 3	20
GUERNSEY COUNTY	
Becks, Logan Gas Co. 1	gas
Speer, Ohio Oil Co. 2	gas
Oliver, Ohio Oil Co. 1	gas
J. S. Speer, Ohio Oil Co. 2	gas
Taylor heirs, Withmer, trustee, 1	gas
Purdum, Cambridge Gas Co. 1	5
White, Leonard O. & G. Co. 1	gas
Morrison, Matthews & Co. 2	gas
Rankin, Ohio Fuel G. Co. 1	gas
Gribbs, Ohio Fuel G. Co. 1	gas
McWilliams, Ohio Fuel G. Co. 1	dry
Lepage, Ohio Fuel G. Co. 1	gas
Medley, Big Lime Oil Co. 1	gas
Wayne Mining Co., Detroit Edison Co. 1	gas
Nicholson, H. Forsythe 1	dry
LICKING COUNTY	
Stair, Edmonds & Co. 9	4
Forry, O. F. S. Co. 5	5
Forry, O. F. S. Co. 6	3
Forry, O. F. S. Co. 7	5
McKinney, Rugg & Co. 7	4
McKiney, Rugg & Co. 8	15
McKinney, Rugg & Co. 9	13
McKinney, North Fork Oil Co. 28	5
McKinney, North Fork Oil Co. 29	12
Bodle, O. F. S. Co. 1	dry
Myers & Co., Leonard Oil Co. 6	5
VanWinkle, Goshen Oil Co. 1	6
Smith, O. F. S. Co. 3	1
Myers & Co., Leonard O. & G. Co. 7	7
Hall, Ark. Fuel O. 2	3
Franks, Detex Oil & G. Co. 9	3
Tavener, Wirdman & Co. 3	4
Wolf & Co., Moose & Adams 3	2
Sinsbaugh, Midland Oil Co. 1	2
Armstrong, Flint Ridge O. & G. Co.	85
Uffner, Hope C. & R. Co. 1	115
Coome, Pure Oil Co. 1	100
MUSKINGUM COUNTY	
Janis, W. W. Janis 1	2
Irvin, Pure Oil Co. 1	dry
VINTON COUNTY	
Davis, Bode & Co. 1	8
COSHOCTON COUNTY	
Moore, Pure Oil Co. 2	15
C. E. Moore, Daisy & Co. 1	15
Pyers, Ohio Oil Co. 2	dry
McFarland, O. F. S. Co. 1	dry
FAIRFIELD COUNTY	
Thompson, Thompson & Co. 1	gas
Kittle, Nixon & Co. 1	dry
KNOX COUNTY	
Lohr, O. F. S. Co. 1	55
Mosier, East Ohio Gas Co. 2	1
ATHENS COUNTY	
Williams, Ohio Fuel G. Co. 1	dry
Wood, Rohnhausen & Co. 5	dry
Biddle heirs, Biddle O. & G. Co. 5	dry
Lawson, Bickle & Son 5	2
Warren, Cook & Co. 1	gas
Shaulis, Logan Gas Co. 1	dry
Milliron, Cooke & Co. 1	1
MORGAN COUNTY	
Hughes, Pure Oil Co. 7	5
Fletcher, Swingle O. & G. Co. 9	gas
Eye, Pure Oil Co. 11	6
Wymer, Thornily & Co. 7	1
Edgerton, Oil City Trust Co. 12	2
Eye, Sun Oil Co. 3	4
Williams, Pure Oil 6	8
Eppley, O. F. S. Co. 4	3
MEIGS COUNTY	
Calhart, Penna. Berea Co. 1	gas
NOBLE COUNTY	
Warren, L. A. Patton 7	2
Harper, Wickens & Co. 7	2
Marquis, Hendershot & Co. 3	2
Brown, Yerain & Co. 5	dry
Shafer, Rucker & Co. 1	1
Brotton, Saoing & Co. 1	3
WASHINGTON COUNTY	
Bosworth, Todd & Co. 2	dry
Green, Patterson & Co. 6	dry
Dana, Reckard & Co. 13	dry
Thomas, Peoples B. & T. Co. 9	1
Rake, Peoples B. & T. Co. 16	dry
Felter, Braden Oil Co.	
Felter, Braden Oil Co. 2	dry
Smith, Henderson Oil Co. 10	1
Haas, River Gas Co. 1	2
Hayes, Ohio Co. 1	2
Kentzelman, Harris & Co. 1	2
Kiggar, Graw & Co. 4	dry
Edwards, Forest O. & G. Co. 7	dry
Wagner, Weppler & Co. 2	1
Schmidt, Patterson & Co. 5	gas
Rubrake, Hess & Sons 10	gas
Rothly, Wiper & Co. 1	dry
Wolfert, Meister & Co. 14	dry
Pfaff, Bank of Lowell 17	2
Chandler, Henning & Co. 3	50
Chandler, Henning & Co. 4	dry
Binnegar, Campbell & Co. 1	dry
JEFFERSON COUNTY	
Lightner, N. G. Co. of W. Va. 1	2
Blackburn, Turner & Co. 7	dry
Rinehart, Carl & Co. 2	3
BELMONT COUNTY	
Ferguson, N. G. Co. of W. Va. 3	15
Taylor heirs, N. G. Co. of W. Va. 1	gas
Shepard, Ferguson & Co. 9	dry
COLUMBIANA COUNTY	
Pieren, George Kiel, Jr., 10	2
Davidson, Davidson 6	2
Wells completed	127
Production	1021
Dry	30
Gas	21

MONROE COUNTY
Wells Drilling
Scott, Carner & Co. 5.
PERRY COUNTY
Rigs
Cookson, Ralph Brothers 2.
McCullough, Hope C. & R. Co. 1.
Ardrey, Mid-East Oil Co. 4.
Wells Drilling
S. H. C. Co., S. H. C. Co. 3.
Melick Bros., Athey Oil Co. 13.
S. C. C. Co., S. C. C. Co. 138.
HOCKING COUNTY
Rigs
Stone, Gordon Oil Co. 5.
Tucker, Griffin Prod. Co. 1.
Laslie, Pure Oil Co. 2.
Dawley heirs, Bell & Shell 1.
Wells Drilling
Noble, Gordon Oil Co. 3.
Brinner, Gordon Oil Co. 3.
Thrush, Rauher O. & G. Co. 2.
W. R. Thrush, Cline, Vensil & Co. 2.
Wyskiver, Preston Oil Co. 2.
Funk, Cal. Ridge O. & G. Co. 1.
Hogan-Murphy, Kachelmacher estate 1.
Poston, O. F. S. Co. 1.
Arnold, Ark. F. O. Co. 12.
Hite, Graham & Co. 8.
Marlow O. & G. Co., Griffin Prod. Co. 5.
Linton, Preston Oil Co. 1.
Mowery, Mayseville O. & G. Co. 2, 3.
Bathlow, Consolidated O. & G. Co. 1.
Robey, Jewel O. & G. Co. 1.
Guess, Duncan & Co. 4.
Houston, Kachelmacher estate 1.
Nall, Ozark O. & G. Co. 1.
Chambers, Gordon Oil Co. 1.
HOLMES COUNTY
Rigs
Smithson, Ohio Oil Co. 3.
Close, Pure Oil Co. 4.
Shuler, Palmer & Co. 2.
Groffs, East Ohio Gas Co. 1.
Miller, Pure Oil Co. 3, 4.
Beller, Kimrow Co. 1.
Smith, Pure Oil Co. 2.
Wells Drilling
Mohr, East Ohio Gas Co. 1.
Patterson, Leonard O. & G. Co. 1.
Allison, Ohio F. G. Co. 1.
Purdy, Pure Oil Co. 1.
Shankland, Ohio F. G. Co. 1.
Nethrow, Empire G. & F. Co. 3.
Findley, Empire G. & F. Co. 1.
Close, Empire G. & F. Co. 3.
Allison, East Ohio Gas Co. 1.
Snyder, Pure Oil Co. 2.
GUERNSEY COUNTY
Rigs
Oliver, Logan Gas Co. 2.
Booth, Logan Gas Co. 1.
Morrison, Withmer, trustee 3.
Brown, Cambridge Glass Co. 1.
Donker, Cambridge Glass Co. 1.
Hill, Ohio Fuel Gas Co. 1.
Briggs, Ohio Fuel Gas Co. 1.
Gowin, Ohio Fuel Gas Co. 1.
Crossley, Ohio Fuel Gas Co. 1.
Simons, Ohio Fuel Gas Co. 1.
Milligan, Ohio Fuel Gas Co. 1.
Anderson, Ohio Fuel Gas Co. 1.
Hawes, Ohio Fuel Gas Co. 1.
Haught, Ohio Fuel Gas Co. 1.
Hall, Ohio Fuel Gas Co. 1.
Young, Pure Oil Co. 1.
Ringer, Pure Oil Co. 1.
T. B. Ringer, Pure Oil Co. 1.
Moore, Ohio Fuel Gas Co. 1.
Bell, Ohio Fuel Gas Co. 1.
Oliver, Ohio Fuel Gas Co. 1.
Nyce, Ohio Fuel Gas Co. 1.
McFadden, Pasco 1.
Brown & Co., McCullen & Co. 1.
Balos, Balos & Co. 1.
Blackburn, Blackburn & Co. 2.
Evans, Jewell & Co. 2.
McKinney, Jewell & Co. 1.
Wells Drilling
Ruby, Ohio Oil Co. 1, 2.
Oliver, Ohio Oil Co. 2.
Caldwell, Withmer, trustee, 1.
Oliver, Ohio F. G. Co. 1.
Clark, Pure Oil Co. 1.
Shriver, Ohio F. G. Co. 1.
McHaffey, Ohio F. G. Co. 1.
McWilliams, Ohio F. G. Co. 2.
J. N. Mahaffey, Ohio F. G. Co. 1.
Ford, Ohio F. G. Co. 1.
O'Brien, Ohio F. G. Co. 1.
Taylor, Ohio F. G. Co. 1.
Summerfrank, Ohio F. G. Co. 1.
Turner, Ohio F. G. Co. 1.
Cambridge Park Elect. Co., Ohio F. G. Co. 1.
Ford, Ohio F. G. Co. 3.
Lowery, Ohio F. G. Co. 1.
Fulton, Stoltz & Co. 1.
McClay, Keith & Co. 1.
Erskin, Miller & Moore 1.
Linton, Linton & Co. 1.
Stephens & Co., Dare & Co. 1.
LICKING COUNTY
Rigs
McKee, E. H. Everett Co. 2.
Crawford, Whitehill & Co. 3.
Burns, Wehrle & Co. 2.
Orr, Pure Oil Co. 1.
Wells Drilling
Seward & Co., Pure Oil Co. 5.
Mayberry, Mead & Co. 1.
Montgomery, Ark. F. O. Co. 4.
Swigert, E. H. Everett Co. 2.
Weiss, Denbow & Co. 8.
Pound, Farmer & Co. 4.
McKinney, North Fork O. Co. 30.
Burkholder, Decker & Co. 1.
Hayes, Weidman & Co. 1.
Newlan, S. C. Brown 1.
VanWinkle, Goshen Oil Co. 2.
Chaney, Shafer & Co. 1.
Miser, Pure Oil Co. 1.
Nail, Ark. F. O. Co. 3.
Orr, Smith, Hazlett & Co. 6.
Tavener, Weidman & Co. 4.
Wolf, Moore & Adams 4.
Stasel, Wehrle & Co. 2.
Crawmer, Planet Oil Co. 4.
Michael, Pure Oil Co. 3.
Coon, Sale & Co. 2.
MUSKINGUM COUNTY
Rigs
Denny, Midland Oil Co. 1.
Irwin, Pure Oil Co. 2.
Wells Drilling
Michael, A. H. Heisey Co. 2.
Varner, Hope C. & R. Co. 1.
Rust, Rust & Co. 1.
Bowlen, Miller & Co. 1.
VINTON COUNTY
Wells Drilling
Stanley, Bell & Shaw 1.
Cameron & Co., Campbell 1.
COSHOCTON COUNTY
Wells Drilling
Asheraft, Leonard O. & G. Co. 6.
McKelvey, Ark. Fuel O. Co. 1.
Mossholder, Murphy Oil Co. 3.
VanWinkle, Preston Oil Co. 3.
FAIRFIELD COUNTY
Wells Drilling
Shaw, Hufford & Co. 2.
KNOX COUNTY
Wells Drilling
Heaton, Pure Oil Co. 5.
Durban, Ohio D. S. Co. 1.
Strouse, East Ohio Gas Co. 1.
ATHENS COUNTY
Wells Drilling
Moore, Sherman & Co. 1.
State of Ohio, Athens State O. & G. Co. 3.
Cordry, Cook & Co. 1.
Lash, Clark & Co. 1.
White, Clark & Co. 1.
MORGAN COUNTY
Rigs
Eye, Pure Oil Co.
Wells Drilling
Longstreth, Sun Oil Co. 6.
Kirkwood, Sun Oil Co. 2.
Smith, Pure Oil Co. 9.
Eppley, Pure Oil Co. 12.
Hughes, Pure Oil Co. 8.
Mendenhall, Seville O. & G. Co. 1.
Schofield, Metcalf & Co. 8.
Edgerton, Oil City Trust Co. 13.
McGrew, Bowman O. & G. Co. 1.
Williams, Pure Oil Co. 4.
MEIGS COUNTY
Wells Drilling
Singer, Miller & Summers Oil Co. 1.
VanMeter, Miller & Summers Oil Co. 1.
Yost heirs, Pure Oil Co. 5.
Capehart, Penna. Berea Co. 2.
Holter & Co., Tebow & Co. 3.
Burdette & Co., Coal Hollow O. & G. Co. 1.
NOBLE COUNTY
Rigs
Radcliff, Young & Co. 1.
Brotten, Sailing & Co. 2.
Bettinger, Speery & Co. 14.
Wells Drilling
Williams, Herds O. & G. Co. 4.
Hill, Harper & Co. 1.
Keifer heirs, Ohio F. S. Co. 1.
Davis, Davis Bros. 1.
WASHINGTON COUNTY
Wells Drilling
Pool, Dailey & Co. 1.
Thomas, Sr., Peoples B. & T. Co. 10.
Weber, Reno Oil Co. 1.
Schramm, Clymer & Co. 5.
Williams, Carner & Co. 1.
Wharton, Ward & Co. 1.
Cleveland & Co., H. Binegar 1.
Binegar, Campbell & Co. 1.
JEFFERSON COUNTY
Wells Drilling
Criswell, Needles & Co. 9.
Wilson, C. M. Stratton 1.
Bayer, Groves & Co. 9.
Dinsmoore heirs, Tope & Co. 1.
HARRISON COUNTY
Rigs
Havelin, Quinn & Co. 6.
BELMONT COUNTY
Wells Drilling
Bumgardner, N. G. Co. of W. Va. 2.
Ferguson & Co., N. G. Co. of W. Va. 4.
Heisley, Murphy & Co. 1.
Ferguson & Co., N. G. Co. of W. Va. 5.
CARROLL COUNTY
Wells Drilling
Harrington, N. G. Co. of W. Va. 2.
Dorant heirs, Brown Vorhees & Co. 1.
COLUMBIANA COUNTY
Wells Drilling
Hoffman heirs, McGlaughlin & Co. 4.
Rigs, 53; wells drilling, 136; total, 189.

CENTRAL OHIO

Summary of Field Operations

	Comp.	Prod.	Dry	Gas	Rigs	Drg.	Ttl.
Knox	2	0	2	0	2	6	8
Ashland	5	0	3	2	8	17	25
Medina	5	5	1	3	0	12	12
Lorain	3	0	1	2	0	2	2
Wayne	9	8	2	6	3	13	16
Holmes	10	277	2	4	7	16	23
Athens	8	0	4	4	1	11	12
Coshocton	3	0	1	2	1	5	6
Guernsey	1	0	0	1	0	0	0
Cuyahoga	5	0	0	5	2	12	14
Vinton	3	12	0	0	0	1	1
Jackson	0	0	0	0	0	1	1
Summit	0	0	0	0	0	1	1
Total Aug.	54	300	16	29	24	97	121
Total July	70	556	17	37	47	103	150
Difference	16	256	1	8	23	6	29

WELLS COMPLETED
KNOX COUNTY
Brown—Fred Kick, East Ohio Gas 4 ... dry
J. H. Workman, Ohio Fuel Gas 6 ... dry
Wells completed ... 2
Dry ... 2
ASHLAND COUNTY
Orange—Floyd Shaum, Logan Gas 2 ... gas
Mrs. Jennie Murray, Logan Gas 1 ... dry
Green—J. C. Walters, Logan Gas 1 ... dry
Sullivan—Hattie Tedrow, Logan Gas 1 .. gas
Clear Creek—Wm. Burns, Hulse & Kundtz 1 ... dry
Wells completed ... 5
Dry ... 3
Gas ... 2
MEDINA COUNTY
Lafayette—W. A. McCabe, John Arthur 1 gas
York—F. Patlowany, Logan Gas 1 ... gas
Frederick Baker, Hulse & Kundtz 2 .. dry
Spencer—E. Breyley, Logan Gas 1 ... gas
Chatham—C. G. Packard, E. R. Edson Sons Co. 23 ... 3
Wells completed ... 5
Oil wells ... 1
Production ... 3
Dry ... 1
Gas ... 3
LORAIN COUNTY
Columbia—M. & B. Francis, Empire Gas & Fuel 1 ... dry
Rose Adams, Chemical Oil 1 ... gas
Grafton—J. A. Rising, Logan Gas 1 ... gas
Wells completed ... 3
Dry ... 1
Gas ... 2
WAYNE COUNTY
Plain—Ada Todd, East Ohio Gas 5 ... dry
Chippewa—A. Zollinger, Westheffer & Winger 1 ... gas
Congress—O. E. Frank, Logan Gas 3 ... gas
Stanley Smith, Ohio Fuel Gas 1 ... gas
Ora Kenney, Empire Gas & Fuel 2 .. gas
Clayton Good, Glen Harmon & Co. 3 gas
S. A. Swanson, Warren Palmer & Co. 4 ... gas
Baughman—Lorena King, Logan Gas 1 dry
Franklin—D. E. Schmuck, Ohio Oil 11 .. 8
Wells completed ... 9
Oil wells ... 1
Production ... 8
Dry ... 2
Gas ... 6
HOLMES COUNTY
Monroe—Oscar Steele, Empire Gas & Fuel 1 ... gas
Hardy—Warren R. Close, Pure Oil 3 ... 40
Mrs. Wilson Pyers, Pure Oil 1 ... 2
D. R. Anderson, East Ohio Gas 5 ... 110
D. R. Anderson, East Ohio Gas 3 ... 125
Paint—Levi Weaver, Logan Gas 1 .... gas
Dan C. Wengard, Ohio Fuel Gas 1 .. gas
S. J. Miller, Ohio Fuel Gas 1 ..... dry
Killuck—Christ Miller, East Ohio Gas 1 dry
L. E. Turner, Kline-Eckstein-McCann 1 ... gas
Wells completed ... 10
Oil wells ... 4
Production ... 277
Dry ... 2
Gas ... 4
ATHENS COUNTY
Carthage—S. A. Wilson, Logan Gas 2 .. dry
Eaton Chase, Logan Gas 2 ..... dry
I. & E. Pierce, Logan Gas 1 ..... gas
Dent Ackley, E. A. Sweency & Co. 1 gas
David Ackley, E. A. Sweency & Co. 1 gas
Waterloo—F. C. Shaulis, Logan Gas 1.. dry
Cannan—Jos. Robinson, Daily & Son 1.. gas
Dodi—G. H. Williams, Ohio Fuel Supply 1 ... dry
Wells completed ... 8
Dry ... 4
Gas ... 4
COSHOCTON COUNTY
Newcastle—Cassingham, Cassingham & Bell Bros. 13, 15 ... gas
Monroe—Guy Pyers, Ohio Oil 1 ..... dry
Wells completed ... 3
Dry ... 1
Gas ... 2
GUERNSEY COUNTY
Wheeling—Howard Beeks, Logan Gas 1 gas
CUYAHOGA COUNTY
Dover—Jas. Jenkins, Hulse & Kundtz 1 gas
W. E. Elliott, Logan Gas 1 ..... gas
C. Nichols, Wiser Oil 1 ..... gas
G. T. Promfrett, Wiser Oil 1 ..... gas
J. Gessner, Dempsey Bros. 1 ..... gas
Wells completed ... 5
Gas ... 5
VINTON COUNTY
Knox—G. C. Davis, Bode & Co. 1 8
Brown—J. & M. Curran, Kastler & Co. 1 2
J. & M. Curran, Kastler & Co. 2 2
Wells completed ... 3
Production ... 12
KNOX COUNTY
Rigs
Jefferson—Peter Kaufman, East Ohio Gas 1.
J. M. Miller, Ohio Fuel Gas 1.
Wells Drilling
Jefferson—Cal Stout—East Ohio Gas 1.
Thos. McMahon, Ohio Fuel Gas 1.
Brown—J. J. & S. M. Hair, Upham Gas 1.
George Lifer, Upham Gas 1.
Morgan—Jacob Hays, Wiederman & Co. 1.
Clay—L. M. Divan, Roy Decker 1.
Rigs, 2; wells drilling, 6; total, 8.
ASHLAND COUNTY
Rigs
Orange—Elizabeth Bleidinger, Logan Gas 1.
Wm. H. Brandt, Logan Gas 2.
L. M. Helbert, Ohio Fuel Gas 2.
Hanover—L. S. Siddle, Logan Gas 1.
M. C. Leatherow, Ohio Fuel Gas 2.
H. Bookman, East Ohio Gas 2.
Green—Wiley Johnson, Logan Gas 1.
Sullivan—D. E. Spencer, Ohio Fuel Gas 1.

Wells Drilling

Orange—Wm. Frizzle, Logan Gas 1.
P. M. Fluke, Logan Gas 1.
J. Henry Bushman, Ohio Fuel Gas 1.
Hanover—Frank Firestone, Logan Gas 2.
Mary Krumpt, Ohio Fuel Gas 1.
Thos. Miller, Ohio Fuel Gas 1.
J. H. Miller, East Ohio Gas 2.
Green—Sanitary Products, Wiser Oil 1.
Walter C. Workman, Logan Gas 1.
J. F. Jones, Ohio Fuel Gas 2.
Sullivan—Lee Burkhart, Logan Gas 1.
John J. Smith, Logan Gas 1.
S. C. Baldorff, Ohio Fuel Gas 1.
J. A. Spencer, Klise-Eckstein-McCann 3.
Miflin—Martha King, Geiger & Barnhart 1.
Lake—John Moores, Logan Gas 1.
Troy—Ray Arnold, Hulse & Kunditz 1.
Rigs, 8; wells drilling, 17; total, 25.

MEDINA COUNTY
Wells Drilling

Litchfield—Geo. Kennedy, Globe Oil & Gas 1.
L. R. Seeley, Logas Gas 9.
Lafayette—H. S. Koppes, Ohio Fuel Gas 1.
Westfield—O. E. Daniels, Logan Gas 1.
Liverpool—Nick A. Granson, Logan Gas 2.
Jos. Walters, Logan aGs 1.
Geo. Stroskopt, Ohio Fuel Gas 2.
Phoebe Stroskopt, East Ohio Gas 1.
Chas. Kinzey, Empire Gas & Fuel 1.
Spencer—Harvey Mantz, Logan Gas 1.
Brunswick—Delpha J. Hitchcock, Ohio Fuel Gas 1.
Granger—Thos. Sylvester, Empire Gas & Fuel 1.
Rigs, 0; wells drilling, 12; total, 12.

LORAIN COUNTY
Wells Drilling

Columbia—Wm. Rundel, Logan Gas 2.
Robert Squires, Ohio Fuel Gas 1.
Rigs, 0; wells drilling, 2; total, 2.

WAYNE COUNTY
Rigs

East Union—M. Latenschlager, Logan Gas 1.
Congress—H. B. Holmes, Logan Gas 1.
O. A. Frank, Logan Gas 4.

Wells Drilling

Wooster—John M. Carroll, Ohio Oil 4.
Green—C. S. & C. A. Eby, W. E. Hawk & Co. 2.
Paint—J. M. Westcott, Ohio Fuel Gas 1.
Plain—J. G. Yocum, Aast Ohio Gas 4.
Milton—A. & E. Bodager, East Ohio Gas 1.
B. Miback, East Ohio Gas 1.
Congress—E. K. Weltman, Logan Gas 1.
Lowery Johnson, Ohio Fuel Gas 1.
Elijah A. Ginter, Arco Oil 1.
Barton Ginter, Warren Palmer & Co. 3.
Cannan—Daniel Elles, Butler Bros. 4.
Chester—D. Hohenshil, Logan Gas 1.
Baughman—Lydia C. Garber, Logan Gas 1.
Rigs, 3; wells drilling, 13; total, 16.

HOLMES COUNTY
Rigs

Monroe—O. M. Smithisler, Ohio Oil 3.
Hardy—Warren R. Close, Pure Oil 4.
J. E. & M. Miller, East Ohio Gas 2.
Lewis Donald, Empire Gas & Fuel 2.
Paint—E. E. Troyer, Logan Gas 1.
Emanuel Weaver, Logan Gas 1.
Kilbuck—Chas. Allison, East Ohio Gas 1.

Wells Drilling

Monroe—John Shanklin, Ohio Fuel Gas 1.
Wm. Miller, Arkansas Fuel Oil 3.
Hardy—Bernice Allison, East Ohio Gas 1.
J. R. Hastings, East Ohio Gas 2.
C. D. & V. Groffs, East Ohio Gas 1.
Mary A. Findlay, Empire Gas & Fuel 1.
Jesse P. Close, Empire Gas & Fuel 3.
Delphia Nethrow, Empire Gas & Fuel 3.
Caroline Cullen, Klise-Eckstein-McCann 1.
Prairie—Lee Durbin, Pure Oil 3.
Paint—I. Y. Miller, Ohio Fuel Gas 1.
Kilbuck—W. H. Mohr, East Ohio Gas 1.
C. P. Allison, Ohio Fuel Gas 1.
Salt Creek—Adam Kirch, Empire Gas & Fuel 1.
Richland—G. L. Strouse, East Ohio Gas 1.
Rosa Bricker, Klise-Eckstein-McCann 1.
Rigs, 7; wells drilling, 16; total, 23.

ATHENS COUNTY
Rigs

Carthage—W. O. & M. Stout, Logan Gas 3.

Wells Drilling

Carthage—Myrtle Runyon, Logan Gas 1.
Isaac Ball, Logan Gas 1.
J. E. Bailey, Jay Oil & Gas 9.
G. E. Bradford, Goddard & Cunningham 1.
Oliver Davis, Hawkins & Co. 1.
J. L. Yarner, Fairfield Gas 1.
Edward Burke, C. W. Nuzum 2.
Elijah Dunlavey, Ohio Fuel Gas 1.
Margaret Rowan, E. A. Sweeney & Co. 2.
Daniel Ackley, E. A. Sweeney & Co. 2.

LIMA FIELD

Summary of Field Operations

	Comp.	Prod.	Dry	Gas	Rigs	Drg.	Ttl.
Wood	6	75	0	0	0	7	7
Hancock	4	110	0	0	0	10	10
Allen	3	55	0	0	0	3	3
Auglaize	1	13	0	0	0	3	3
Sandusky	6	39	0	0	0	4	4
Mercer	6	60	1	0	0	7	7
Van Wert	1	20	0	0	0	1	1
Seneca	1	1	0	0	0	0	0
Lucas	0	0	0	0	0	4	4
Ottawa	1	15	0	0	0	6	6
Shelby	2	30	0	0	1	3	4
Hardin	2	95	0	0	0	3	3
Darke	2	36	0	0	0	2	2
Paulding	1	0	1	0	2	0	2
Wyandot	2	0	2	0	0	1	1
Clark	0	0	0	0	0	1	1
Lima Field	38	549	4	0	3	55	58
Michigan	11	157	3	0	12	26	38
Total Aug.	49	706	7	0	15	81	96
Total July	57	956	5	2	9	76	85
Difference	8	250	2	2	6	5	11

WELLS COMPLETED
WOOD COUNTY

Henry—J. P. Cleary, Ohio Oil 1 15
Lake—Fred Berndt, Lantz, Schulte & Co. 2 1
Perrysburg—Louisa DeVerna, Oko Oil & Gas 5 14
J. J. Heilman, Oko Oil & Gas 3..... 6
Mary Heilman, Oko Oil & Gas 1 14
Chas. Thaiss, Jr., Oko. Oil & Gas 3 ... 25
Wells completed 6
Production 75

HANCOCK COUNTY

Liberty—M. E. Discus, Kirk & Discus 1 20
D. Sherrick, Ohio Oil 18 ..... abd
J. Newhouse, Ohio Oil 10, 63, 64 ..... abd
S. B. Swartz, Ohio Oil 2 ..... abd
Eagle—M. H. Deeds, J. M. Steen & Co. 24 20
Union—M. H. Deeds, Harpst Bros. 9 .. 10
Biglick—Elnora Cross Ridge O'l & Gas Synd. 2 60
Wells completed 4
Production 110
Abandoned 5

ALLEN COUNTY

Bath—John Lenney, Ira B. Post & Co. 1 35
P. D. Driver, O. T. Botkins & Co. 4.. 5
S. H. Vore, C. A. Peavey & Co. 7.... 15
John Schlosser, Frederick Roeder, Jr., 3, 4, 5, 7 ..... abd
Wells completed 3
Production 55
Abandoned 4

AUGLAIZE COUNTY

Salem—W. T. Siebert, Bachelor Oil 11.. 13
O. F. Benton, Moore & Co. 3 ..... abd
Wells completed 1
Production 13
Abandoned 1

SANDUSKY COUNTY

Washington—J. H. Meyers, Ohio O'l 10 10
J. H. Meyers, Ohio Oil 11 6
Sophia Myerholtz, Home Banking 16.. 6
Mary Hetrick, W. C. Richards & Co. 8 abd
Jackson—S. M. Klotz, Home Banking 5 2
Martha Talbert, Haubert & Talbert 7 10
Scott—Wm. O. Doll, Harley, Henderson & Warren 5 5
Wells completed 6
Production 39
Abandoned 1

MERCER COUNTY

Center—Geo. Bollinger, Drake & Co. 1.. 3
Hopewell—Ben Hollworth, June Oil 3 10
Union—J. U. Kennedy, Stelzer & Boyd 1 2
Recovery—Adam Fecher, heirs, A. W. Neely & Co. 5 35
Rose Fecher, Sam K. Tate, Jr., 5..... 10
Liberty—J. Bollenbacher, Jr., Beatty & Hays 4 ..... dry
Wells completed 6
Production 60
Dry 1

VAN WERT COUNTY

Mendon—Unknown, Chilcote Oil & Gas 1 20
York—Henry Clark, Lynch & Sellers 1, 2, 5, 6 ..... abd
John Goodwin, Lynch & Sellers 1... abd
Jennings—J. C. Biner, Lynch & Sellers 4, 7, 11 ..... abd
Wells completed 1
Production 20
Abandoned 8

SENECA COUNTY

Clinton—A. E. Geyer, Arthur E. Geyer 1 1

OTTAWA COUNTY

Harris—Charles H. Maggig, Gust Maggig & Sons 14 15

SHELBY COUNTY

Cynthian—M. Zimmerman, Wittmer Property Trus., 3 25
Jennie Monnin, Lee A. Watson 4 5
Wells completed 2
Production 30

HARDIN COUNTY

McDonel—A. R. Zimmerman, Hardin O'l & Gas 6 50
Floyd Stalder, Cockley Oil 2 45
Wells completed 2
Production 95

DARKE COUNTY

Mississinewa—W. C. Disher, Cole Oil & Gas 14 25
J. E. Schmetz, Illindo Oil 5 11
Wells completed 2
Production 36

PAULDING COUNTY

Jackson—Wm. Russell, Detroit-Cleveland Oil & Gas 1 ..... dry

WYANDOT COUNTY

Ridge—S. B. Chesbrough, South Bend Producers 1 ..... dry
G. Tong, Ohio Oil 1 ..... dry
Wells completed 2
Dry 2

MICHIGAN
SAGINAW COUNTY

Saginaw—John Bremer, Saginaw Prospecting 1 20
Martin Hanson, Saginaw Prospecting 1 20
August Kruske, Saginaw Prospecting 1 20
Waterworks Sub., Saginaw Prospecting 1 20
John Schenteit, Sun Co. 1 20
John Schenteit, Sun Co. 2 20
Ernest Fisher, Ohio Fuel Corp. 1..... 15
Carrollton—Mershon-Eddy-Parker, Ohio Oil 1 22
Fred Pagel, John H. Shaltry & Co. 1 dry
Thomas—Henry Owen, Murrin & Le-Croix 1 ..... dry
Wells completed 10
Production 157
Dry 2

BAY COUNTY

Bay Road—Leonard Gehringer, Jack Hendricks & Co. ..... dry

WOOD COUNTY
Wells Drilling

Portage—C. L. Sines, Wayne Oil 1.
Lake—H. C. Michelson, Lantz, Schulte & Co. 3.
Perrysburg—Geo. DeVerna, Oko Oil & Gas 7.
J. J. Heilman, Oko Oil & Gas 4.
Mary Heilman, Oko Oil & Gas 2.
C. Voland, Oko Oil & Gas 1.
Webster—Mike Roller, John Gelding & Co. 2.
Rigs, 0; wells drilling, 7; total, 7.

HANCOCK COUNTY
Wells Drilling

Liberty—Sarah Fountain, J. T. Montgomery & Co. 24.
A. Schoonover, Harpst Bros. 3.
F. Rish, B. B. Porter 4.
Allen—Hl. Franks, P. J. Pool, Estate, 12.
Portage—Minerva Overholt, Ohio Oil 6.
Eagle—Frank Freed, R. T. Rittenhouse 5.
Joe Ernest, Keiser Oil 2.
Marion—Merle E. Bower, Nerl E. Bower 2.
Elmer Spahr, Denhoff Bros. 1.
Biglick—C. S. Chambers, Ridge Oil & Gas Synd. 3.
Rigs, 0; wells drilling, 10; total 10.

ALLEN COUNTY
Wells Drilling

Bath—P. D. Driver, O. T. Botkins & Co. 5.
J. W. Fetter, C. C. Apple 12.
Spencer—Ed Reynolds, South Fork Oil 4.
Rigs, 0; wells drilling, 3; total, 3.

AUGLAIZE COUNTY
Wells Drilling

Washington—A. E. Waggoner, W. C. Richards & Co. 5.
Jackson—Martha A. Talbert, Haubert & Talbert 8.
S. M. Klotz, Home Banking 6.
Scott—Stitt, Poole & Co., Stitt, Pool & James 54.
Rigs, 0; wells drilling, 4; total, 4.

MERCER COUNTY
Wells Drilling

Center—E. Snaveley, Ohio Oil 8.
Charlotte Nolan, Masters & Howard 5.
Hopewell—Ben Hollworth, June Oil 4.
Recovery—Adam Fecher heirs, A. W. Neely & Co. 6.
Jefferson—Hacker heirs, D. A. Miller & Co. 5.
Washington—B. Jutte, Dilbone & Co. 1.
Butler—Jos. G. Wenning, J. C. Bailey 5.
Rigs, 0; wells drilling, 7; total, 7.

VAN WERT COUNTY
Wells Drilling

Mendon—Unknown, Chilcote Oil & Gas 2.

LUCAS COUNTY
Wells Drilling

Monclova—Wm. Black, L. W. Vermilya Rec. 2.
Geo. Ward, Waterville Gas & Oil 8.
Oregon—Gertrude J. Niles, Ohio Oil 44.
R. A. Bartley, Fred Keister 10.
Rigs, 0; wells drilling, 4; total, 4.

OTTAWA COUNTY
Wells Drilling

Harris—A. F. Alyn, Ohio Oil 3.
H. W. Neiman, Burman Oil 3.
Benton—Wm. Nasses, Gladieux & Herman 2.
Salem—A. H. Mylander, Oak Harbor Nat. Gas 1.
Catawba—Hesselbart & Smith, Catawba Oil & Gas 1.
E. E. Neal, Ohio Oil 1.
Rigs, 0; wells drilling, 6; total, 6.

SHELBY COUNTY
Rigs

McLean—Henry Ernst, L. T. McGrath 4.

Wells Drilling

Cynthian—Theresa Goffena, Ohio Oil 3.
N. Simon, Ellerman Oil 1.
McLean—A. P. Rotterman, Ft. Laramie Oil & Gas 1.
Rigs, 1; wells drilling, 3; total, 4.

HARDIN COUNTY
Wells Drilling

McDonel—Elizabeth Arthur, Roundhead Oil & Gas 6.
Ira C. Shick, Boston-S. W. Oil & Gas 2.
A. R. Zimmerman, Hardin Oil & Gas 7.
Rigs, 0; wells drilling, 3; total 3.

DARKE COUNTY
Wells Drilling

Mississinewa—James Snyder, Cole Oil & Gas 6.
C. D. Rutenour, Ira Hance 2.
Rigs, 0; wells drilling, 2; total, 2.

PAULDING COUNTY
Rigs

Harrison—C. Springer, John T. Schunck 5.
A. M. Bailey, U. S. A. Oil 6.
Rigs, 2; wells drilling, 0; total, 2.

WYANDOT COUNTY
Wells Drilling

Ridge—S. B. Chesbrough, South Bend Producers 2.

CLARK COUNTY
Wells Drilling

Madison—Mattinson, T. D. Friend 1.

MICHIGAN
SAGINAW COUNTY
Rigs

Saginaw—Casper Ulrich, Bliss Petroleum 4.
Chas. R. Phillips, Barker Oil & Gas 1.
Wm. Scherzer, Sun Oil Co. 1.
C. J. Rabs, Sun Oil Co. 1.
John Schoentelt, Sun Oil Co. 4.
Gager, Samuel Schwinck 1.
Carrollton—Buchean, S. M. Bacon & Co. 1.
Oak—Michigan Sts., Jack Hendricks & Co. 1.
Buena Vista—Charles H. Kretchmer, Saval Development 1.
Spaulding—Anthony Benkert, Henry A. Maryin 1.
St. Charles—Craven, Michael McLaughlin & Co. 1.

Wells Drilling

Saginaw—Mrs. Jane Marshall, Vorhees & Co. 1.
Ferdinand Steltzriede, Sun Oil Co. 1.
Dr. D. E. Bradshaw, Sun Oil Co. 1.
John Schoentelt, Sun Oil Co. 3.
Chas. Ulrich, Vorhees & McNally 1.
Casper Ulrich, Bliss Petroleum 2, 3.
Fred Engle, Bliss Petroleum 2.
Ernest Fisher, Ohio Fuel Corp. 2.
Waterworks Ad, Saginaw Prospecting 2.
Fred Remer, Saginaw Prospecting 1.
Spatz, Superior Oil 2.
Weiss, Saval Development 1.
Carrollton—E. E. Householder, Saginaw City Bldg. Co. 1.
John Winters, W. G. Berghern & Co. 1.
Thomas Walker, Chas. ". Brandt & Co. 1.
Conrad Brechtlebauer, Myron E. Lee 1.
Reinhart, John H. Shaltry & Co. 1.
Chas. Priess, Valley Oil & Gas 1.
Buena Vista—Schwannecke, Gardner Petroleum 1.
Geo. Wickham, Wanigas Oil Corp. 1.
Taymouth—George Juddy, S. M. Bacon & Co. 1.
Bridgeport—Rogner, Brown City Prospecting 1.
Rigs, 11; wells drilling, 23; total, 34.

MIDLAND COUNTY
Rigs

Midland—Hlavacek, Saginaw Prospecting 1.

ALCONA COUNTY
Wells Drilling

West Harrisville—Local Capital 1.

MONROE COUNTY
Wells Drilling

Dundee—Frank Roe, Jackson County Oil & Gas 1.

JACKSON COUNTY
Wells Drilling

Napoleon—Silvers, Jackson County Oil & Gas 1.

ILLINOIS

Summary of Field Operations

	Comp.	Prod.	Dry	Gas	Rigs	Drg.	Ttl.
Clark	9	83	2	0	0	5	5
Cumberland	0	0	0	0	0	1	1
Crawford	9	62	2	1	1	5	6
Lawrence	1	0	1	0	1	5	6
Wabash	10	460	3	0	4	18	22
Marion	1	0	1	0	0	4	4
Coles	0	0	0	0	0	2	2
Douglass	0	0	0	0	0	1	1
Jasper	0	0	0	0	0	1	1
Fayette	0	0	0	0	1	0	1
Edwards	0	0	0	0	0	1	1
McDonough	2	0	2	0	0	2	2
Randolph	1	0	1	0	0	2	2
Madison	0	0	0	0	0	2	2
St Clair	1	0	1	0	0	0	0
Macon	0	0	0	0	0	1	1
Morgan	0	0	0	0	0	1	1
Shelby	0	0	0	0	0	1	1
Total Aug.	34	605	13	1	7	57	64
Total July	33	1,124	6	2	4	52	56
Difference	1	419	7	1	3	5	8

WELLS COMPLETED
CLARK COUNTY

Parker—N. & K. Young, Ohio Oil 118.. 1
N. & K. Young, Ohio Oil 119 1
N. B. Lee, Chas. E. King 7 4
Westfield—Hartford Drake, Ohio Oil 16 4
Casey—N. L. Slater, Trenton Rock Oil 1 dry
Chas. W. Lowe, Holmes & Co. 4 ..... dry
A. W. Baker, Arkansas Fuel Oil 2 55
Martinsville—A. W. Cavolt, Ohio Oil 5 16
Johnson—C. O. Gross No. 2, Southern Oil 33 8
Wells completed 8
Production 83
Dry 2

CRAWFORD COUNTY

Honey Creek—J. D. Reaville, John Phipps 6 8
Martin—A. W. Mann, Frost Oil 4 10
L. M. Highsmith, Abbott & Co. 2... dry
Montgomery—G. B. Ford, Walter Squites & Co. 9 5
C. A. Dickman, W. C. McBride, Inc. 7 10
J. P. Sager, Thos. Flynn & Co. 9... gas
J. P. Sager, Thos. Flynn & Co. 10.... 30
Prairie—Wylie Lamb, Bell Bros. 8 1
Licking—Silas Wilkins, Peoples Bank & Trust 4 ..... dry
Wells completed 9
Production 67
Dry 2
Gas 1

LAWRENCE COUNTY

Dennison—Wm. Sneed No. 1, Ohio Oil 11 ..... abd
Bridgeport—J. T. Griggs No. 1, Ohio Oil 25 ..... abd
Lawrence—L. B. Wilson, Ohio Oil 1... abd
Russell—A. J. Vaught, Hartman & Co.1 dry
Wells completed 1
Dry 1
Abandone 3

WABASH COUNTY

Wabash—E. Alka heirs, Joe S. Young, Jr., & Co. 3 20
Joseph Keyser, Joe S. Young, Jr., & Co. 1 170
W. O. Johnson, Adams Corner Oil Co.1 120
Kogan heirs, Mayhugh & Co. 7 25
Breen, McCoplin Brothers 2 100
Sallie Compton, E. C. Bothwell 1 ... dry
Wm. Shaffer, Roberts Oil Co. 1 ..... dry
Jesse Cisil, E. C. Bothwell & Co. 3... 10
Friendsville—C. Frick, Healey & Lee 2 15
Lick Prairie—Wm. Crump, Miller, Clark & Co. 1 ..... dry
Wells completed 16
Production 460
Dry 3

MARION COUNTY

Centralia—John Kinsey, Petro Oil & Gas 14 ..... dry

McDONOUGH COUNTY

Plymouth-Colmar—C. B. Allison, Ohio Oil & Bacon 1 ..... dry
Clayton, Ohio Oil & Bacon 1 ..... dry
Wells completed 2
Dry 2

RANDOLPH COUNTY

Sparta—J. C. Foster Holze & Co. 1... dry

ST. CLAIR COUNTY

Section 26-1-10w—Geo. Dyraff, Prairie Oil & Gas 1 ..... dry

CLARK COUNTY
Wells Drilling

Parker—N. & K. Young, Ohio Oil 120.
Westfield—Hartford Drake, Ohio Oil 17.
Casey—J. Y. Smith, Ohio Oil 7.
James Rush, W. C. McBride, Inc. 25.
George Smith, C. L. Palmer 10.
Martinsville—E. R. Ault, Trenton Rock Oil 9
C. L. McClelland, Trenton Rock Oil 5.
T. J. Ramsey, John T. Smith & Co. 4.
Wabash—Hodson, Albon & Co. 1
Rigs, 0; wells drilling, 9; total, 9.

CUMBERLAND COUNTY
Wells Drilling

Crooked Creek—J. Kelley, Holmes & Co. 1.

CRAWFORD COUNTY
Rigs

Robinson—I. L. Firebaugh No. 1, Ohio Oil 11.

Wells Drilling

Oblong—P. Miller, Mahutska Oil 13.
Honey Creek—J. L. Cullon, Barber & Co. 1.
Oliver Lawrence, L. C. McDowell & Co. 1.
C. A. Reaville, Selby-Cisler Producing 14.
Prairie—A. E. Joseph, McNally & Starr 6.
Rigs, 1; wells drilling, 5; total, 6.

LAWRENCE COUNTY
Rigs

Dennison—Mrs. G. H. Highsmith, Frank H. Brown & Co. 1.

Wells Drilling

Dennison—Ella Smith, Andrews & Co. 1.
Wm. Gillespie, Ohio Oil 6.
Victor B. Harling 38-a., Ohio Oil 6.
Ellen Lutz, Ohio Oil 7.
Bridgeport—J. R. Middaugh, Ohio Oil 23.

WABASH COUNTY
Rigs

Wabash—Nora Marcotte, W. C. McBride, Inc., 5.
J. H. Cisil, W. C. McBride, Inc. 5.
Collison heirs, Collison Farm Oil 4.
Mack Madden, Mahutska Oil 5.
F. M. Leek, Mt. Carmel Oil 6.
A. A. Gahr, Rahl & Co. 1.
W. O. Johnson, Adams Corner Oil 2, 3.
Kate Keyser, Wirebaugh, Young & Co. 5.
Banks, Hope Oil 4, 5.
Jos. Keyser, Joe S. Young, Jr., & Co., 2, 3.
Friendsville—J. O. Wood, Wood Oil 3.
J. Goodart, Henneberger, Young & Co. 1.
Abner Litterland, Henneberger, Alspaugh & Co. 1.
Belmont—P. R. Fisher, Bell Brothers 1.
Lick Prairie—Chas. S. Groff, Miller, Clark & Co. 1.
Rigs, 4; wells drilling, 18; total, 22.

MARION COUNTY
Wells Drilling

Centralia—Homer M. Adams, Ohio Oil 1.
Kiester, Ohio Oil 3.
A. W. Webster, Petro Oil & Gas 8.
H. Higgins, H. Higgins & Co. 1.
Rigs, 0; wells drilling, 4; total, 4.

COLES COUNTY
Wells Drilling

Charleston—Earl Thrakill, Block Oil Corp. 1
Ashmore—Luther Houghton, Shrider & Co. 1.
Rigs, 0; wells drilling, 2; total, 2.

DOUGLASS COUNTY
Wells Drilling

Sargent—W. E. Brown, Douglass Oil 1.

JASPER COUNTY
Wells Drilling

Grandville—Ella Decker, Wimsett & Co. 1.

FAYETTE COUNTY
Rigs

Fayette—John Baxter, H. McCurdy 1.

EDWARDS COUNTY
Wells Drilling

French Creek—John R. Helm, Grayville Oil Synd. 1.

McDONOUGH COUNTY
Wells Drilling

Plymouth-Colmar—Stoneking, unknown 3.
Near Augusta—Nell Thoreson, W. A. Evans 1.
Section 18-5-4w—M. H. Williams, Fisher & Co. 1.
Rigs, 0; wells drilling, 3; total, 3.

RANDOLPH COUNTY
Wells Drilling

Sparta—McElroy & Bill Goddard & Co. 1.
Section 1-4-6w—Andrews, E. G. Mason & Co. 1.
Rigs, 0; wells drilling, 2; total, 2.

MADISON COUNTY
Wells Drilling

Nameoki—Goodrich, Goodrich Bros. 1.
Pin Oak—Gusewiller, Assembly Oil & Gas 1.
Rigs, 0; wells drilling, 2; total, 2.

MACON COUNTY
Wells Drilling

Hickory Point—A. Parris, Powers & Co. 1.

MORGAN COUNTY
Wells Drilling

Section 18-15-9w—Conklin, P. C. Irwin & Co. 1.

SHELBY COUNTY
Wells Drilling

Holland—W. Prosser, A. L. Ginther 1.

INDIANA FIELD

Summary of Field Operations

	Comp.	Prod.	Dry	Gas	Rigs	Drg.	Ttl.
Wells	0	0	0	0	1	1	1
Blackford	1	1	0	0	0	1	1
Jay	0	0	0	0	0	3	3
Adams	7	215	0	0	4	10	14
Huntington	0	0	0	0	0	2	2
Gibson	1	0	1	0	0	3	3
Pike	7	347	0	1	1	5	6
Sullivan	3	3	0	2	0	2	2
Allen	1	10	0	0	1	2	3
Knox	0	0	0	0	0	3	3
Daviess	4	55	1	0	0	5	5
Vigo	1	0	0	1	0	1	1
Shelby	2	0	0	2	0	2	2
Lagrange	1	0	1	0	0	0	0
Dubois	0	0	0	0	0	1	1
Warrick	0	0	0	0	0	1	1
Benton	0	0	0	0	0	1	1
Harrison	1	0	0	1	0	0	0
Johnson	1	0	1	0	0	1	1
Madison	1	0	0	1	0	1	1
Martin	1	0	0	1	0	2	2
Monroe	0	0	0	0	0	1	1
Morgan	0	0	0	0	1	0	1
Parke	1	0	1	0	0	0	0
Total Aug.	33	631	6	8	7	48	55
Total July	29	817	3	2	3	45	48
Difference	4	186	3	6	4	3	7

WELLS COMPLETED
BLACKFORD COUNTY

Harrison—A. F. Gerard, Montpelier Development 2 1

ADAMS COUNTY

Jefferson—Wm. Bollenbacher, W. E. McKelly & Co. 1 30
M. J. Niblick, J. H. Harmon & Co. 6.. 10
Wm. Smitley, Harmon & Watts 2 ... 75
Blue Creek—Schulte, Schulte, Haney & Co. 6 5
H. L. Sipe, Geo. S. Lacknett 2 55
Schulte, Schulte, Haney & Co. 7 20
Wabash—Mrs. D. Hawbacker, Fink & Smith 1 20
Wells completed 7
Production 215

GIBSON COUNTY

Center—A. J. Mans, Ohio Oil 1 ..... dry

PIKE COUNTY

Logan—Church lot, J. Morsey 1 153
Wm. Miley, J. Morsey 2 12
Walter Miley, Henry Skidmore & Co. 2 150
Clay—Stewart Bros., Murphy Oil 5..... 2
Stewart Bros., Murphy Oil 6 20
Chas. McAtee, A. B. Bement 1 10
Madison—A. H. Johnson, Ohio Oil 2 .. gas
Wells completed 7
Production 347
Gas 1

SULLIVAN COUNTY

Gill—G. Irwin, Bays 1 ..... gas
Turman—W. W. Harris, Ohio Oil 12 .. 3
M. J. Beard No. 2, Ohio Oil 26 ..... gas
Wells completed 3
Production 3
Gas 2

ALLEN COUNTY

Maumee—J. F. Butt, Estes, Manion & Co. 1 10

DAVIESS COUNTY

Veale—Frank Gaither, Geiger Oil 6.... 5
Gus Wonders, Thorn Oil & Gas 1.... 25
J. M. Peek, Peek Oil 5 ..... dry
S. E. Washington—Allison, Cavanaugh & Co. 1 25
Wells completed 4
Production 55
Dry 1

VIGO COUNTY

Sugar Creek—Nattkemper, Welch, Flynn & Gambill 1 ..... dry

SHELBY COUNTY

Fairland—Near Bass Wells, E. R. Donnell, 1, 2, ... gas
Wells completed 2
Gas 2
Gas 2

LAGRANGE COUNTY

Howe—Howe Oil & Gas 1 ..... dry

HARRISON COUNTY

Boone—Hank McBride, James Howes & Co. 1 ..... gas

JOHNSON COUNTY

N. W. Franklin—Universal Development 1 ..... dry

MADISON COUNTY

Pendleton—Reason, Pendleton Nat. Gas 1 ..... gas

MARTIN COUNTY

Loogoottee—Kenner Dilley, Loogoottee Light & Fuel 1 ..... gas

PARKE COUNTY

Reserves—Fellows, Bloomington Capital 1 ..... dry

WELLS COUNTY
Wells Drilling

Nottingham—John Harris, Local People 1.

BLACKFORD COUNTY
Wells Drilling

Harrison—A. E. Gerard, Montpelier Development 3.

JAY COUNTY
Wells Drilling

Green—Ray Houck, Bloxsome & Co. 1.
Penn—Sarah J. Bourne, Claud Thompson 1.
Bear Creek—Irvin Campbell, M. T. Smith & Co. 4.
Rigs, 0; wells drilling, 3; total, 3.

ADAMS COUNTY
Rigs

Jefferson—John Parr, Geo. S. Lacknett 1
Dan Boze, Geo. S. Lacknett 1.
Wabash—Mrs. D. Hawbacher, Fink & Smith 2.
Monroe—Stengle & Craig, Anderson & Co. 2.

Wells Drilling

Jefferson—Wm. Bollenbacher, W. E. McKelvy & Co. 2.
Joe Peel, W. E. McKelvy & Co. 1.
Mary J. Niblick, J. H. Harmon & Co. 7.
Wm. Smitley, Harmon & Watts 3.
Wilson 39-a. Alvin S. Spindler 1.
Blue Creek—Schulte, Schulte, Haney & Co. 8.
Ed. Luginbill, Schulte, Haney & Co. 1.
C. Jones, William King 4.
Wabash—B. Parr, Kelly & Daugherty 1.
J. G. Steiner, M. B. Daugherty & Co. 3.
Armstrong heirs, Chicago Oil 3.
Rigs, 4; wells drilling, 10; total, 14.

HUNTINGTON COUNTY
Wells Drilling

Salamonie—W. D. Boniffeld, Wood & Co. 7.
J. L. Priddy, March Petroleum 11.
Rigs, 0; wells drilling, 2; total, 2.

GIBSON COUNTY
Wells Drilling

Barton—M. M. Conrad, Bell Bros. 1.
Washington—Jos. Armstrong, Bell Bros. 1.
White River—F. Burkett, Enlow & Co. 1.
Rigs, 0; wells drilling, 3; total, 3.

PIKE COUNTY
Rigs

Logan—E. Beck, Alex Singer 2.

Wells Drilling

Logan—Wm. Miley, J. Morsey 3.
Walter Miley, Henry Skidmore & Co. 3.
Sarah Shoaf heirs, Andrews & Burden 3.
Erma Wilson, Wiser Oil 2.
Clay—Stewart Bros., Murphy Oil 7.
Rigs, 1; wells drilling, 5; total, 6.

SULLIVAN COUNTY
Wells Drilling

Fairlanks—J. V. Merrill, Oh'o Oil 22.
J. F. Harrison, Hollingsworth & Co. 5.
Rigs, 0; wells drilling, 2; total, 2.

ALLEN COUNTY
Rigs

Maumee—D. Helmke, Waterloo Oil & Gas 3.

Wells Drilling

Maumee—M. Roamake, Schuran Oil 1.
J. F. Butt, Estes, Manion & Co. 2.
Rigs, 1; wells drilling, 2; total, 3.

KNOX COUNTY
Wells Drilling

Decker—Ballentine, Eastern Gulf Oil 1.
Nellie M. Orr, Eastern Gulf Oil 1.
Harrison—W. E. Harrison, Murphy Oil 5.
Rigs, 0; wells drilling, 3; total, 3.

DAVIESS COUNTY
Wells Drilling

Veale—J. W. Backus, Geiger Oil 1.
H. Ragsdale heirs, Peek Oil 2.
Gus. Wonders, Thorn Oil & Gas 2.
Andy Gress, Neal & Co. 1.
D. K. Morgan, Neal & Co. 1.
Rigs, 0; wells drilling, 5; total, 5.

VIGO COUNTY
Wells Drilling

Riley—Section 14-11-8, E. D. Fagan & Co. 1.

SHELBY COUNTY
Wells Drilling

Van Buren—J. Harshbarger, L. Nicholson 1.
Bradywine — Elmer Vernon, Indianapolis parties 1.
Rigs, 0; wells drilling, 2; total, 2.

WARRICK COUNTY
Wells Drilling

Pidgeon—Vock & Folson, Turner Oil & Gas 1.

DUBOIS COUNTY
Wells Drilling

Wm. Meissener, Wheeler & Co. 1.

BENTON COUNTY

Oxford—Jesse Voliva, Chicago parties 1.

JOHNSON COUNTY
Wells Drilling

Franklin—Universal Development 2.

MADISON COUNTY
Wells Drilling

Pendleton—Kessling, Pendleton Nat aGs 1.

MARTIN COUNTY
Wells Drilling

Loogoottee—Kenner Dilley, Loogoottee Light & Fuel 2.
Shoals—Dr. Franklin, Ohio Oil 1.
Rigs, 0; wells drilling, 2; total, 2.

MONROE COUNTY
Rigs

Polk—B. F. Morgan & Co. 2.

MORGAN COUNTY
Wells Drilling

Mooresville—Unknown, Gilbert Gray & Co. 1.

KENTUCKY-TENNESSEE

Summary of Field Operations

	Comp.	Prod.	Dry	Gas	Rigs	Drg.	Ttl.
Warren	3	3	1	0	1	12	13
Allen	8	192	1	0	0	15	15
Barren	25	207	2	0	0	33	33
Owensboro	28	365	9	0	0	23	23
Cumberland-Monroe	1	40	0	0	2	14	16
Simpson	1	5	0	0	0	2	2
Casey	0	0	0	0	1	1	2
Clinton	2	648	0	0	0	4	4
Christian	0	0	0	0	0	1	1
Wayne	4	3	3	0	0	3	3
Lee-Owsley	2	10	0	0	0	9	9
Powell	0	0	0	0	0	1	1
Estill	12	94	3	0	0	9	9
Wolfe	1	25	0	0	0	0	0
Lawrence-Johnson	13	128	0	0	0	10	10
Johnson-Magoffin	8	103	1	0	3	19	22
Floyd-Knott	1	0	0	1	0	5	5
Knox	0	0	0	0	0	3	3
Morgan	1	0	1	0	0	3	3
Elliott	1	3	0	0	0	2	3
Menifee	0	0	0	0	0	2	2
Laurel	0	0	0	0	0	1	1
Jackson	0	0	0	0	0	1	1
Greenup	0	0	0	0	0	1	1
Carter	0	0	0	0	0	3	3
McCreary	0	0	0	0	0	2	2
Pike	1	0	0	1	0	0	0
Kentucky	112	1,826	21	2	8	179	187
Tennessee	1	500	0	0	0	15	15
Mississippi	0	0	0	0	5	10	15
Alabama	0	0	0	0	0	4	4
Florida	0	0	0	0	6	7	13
Total Aug.	113	2,326	21	2	19	215	234
Total July	129	904	27	3	17	212	229
Difference	16	1,422	6	1	2	3	5

WELLS COMPLETED
WARREN COUNTY

Bowling Green—J. W. Covington Block 8, Paul Cooksey 9 2
E. Morgan, Stinson & Morrow 6 1
J. Q. Adams, J. H. Wright 4 ..... dry
Wells completed 3
Production 3
Dry 1

ALLEN COUNTY

Scottsville—M. J. Lewis, Mealey & Mealey 20 3
John Meador, Chas. Foster 5 1
J. F. Stovall, James Healey, Atty. 13 3
J. H. Rickman, Citizens Oil 19 ..... dry
W. M. Dodson, A. Davis 4 75
W. M. Dodson, A. Davis 5 75
Parrish, T. S. Bastress 1 5
Widow Gibbs, unknown 1 30
Wells completed 8
Production 192
Dry 1

BARREN COUNTY

Emery-Moore Pool—Howard, Fred C. Moore 11 5
Howard, Fred C. Moore 12 3
Mayfield, Houchins Leasehold 16 ... 8
W. E. Steffey, Ruby Oil & Gas 7 ... 7
W. E. Steffey, Seams & Co. 3 8
Wilson, Phip Kopel 3 5
Hall Baker Pool—Redman, Wood Oil 7 5
Hall Baker, Consolidated Gas 10.... 8
Gorby Pool—M. S. Chamberlain, Houchins Leaschold 1 5
M. S. Chamberlain, Consolidated Gas 2 5
Jim Jones, Lew J. Emery, Jr., Sons 5 5
Jim Jones, Lew J. Emery, Jr., Sons 7 7
Canaday, Hiland Oil & Gas 18 6
Hatfield, J. J. Sayre 4 5
Whitney, unknown 1 ..... dry
Knob Road Pool—Dauter Bros., Zeigler Bros. 1 20
Dauter Bros. Zeigler Bros. 2 15
Richardson, Star Oil & Gas 8 10
Richardson, Star Oil & Gas 9 8
Richardson, Star Oil & Gas 10 12
Lecta Pool—C. B. Jones, Esslinger Oil 9 10
C. B. Jones, Esslinger Oil 10 20
Grady, Coombs & Co. 3 12
Dean Baird & DeCaignay 2 15
Richardson Pool — Scrimminger, unknown 1 ..... dry
Wells completed 25
Production 297
Dry 2

OWENSBORO DISTRICT
(Hancock-Ohio-Daviess Counties

Owensboro—J. W. McDaniel, Security Oil 1 8
J. L. Stinnett, Rex-Pyramid Oil 1... dry
Laura Mercer 84a, Penn-Indiana Oil 8 35
C. A. Kelly, Penn-Indiana Oil 3 ... 10
Orvis A. Greer, Penn-Indiana Oil 1... dry
Weddingfield, George Randolph 2.... dry
J. J. Midkiff, White Plains Oil & Gas 5 dry
J. J. Midkiff, White Plains Oil & Gas 6 50
John C. Ward, White Plains Oil & Gas 3 15
R. B. Ellis, White Plains Oil & Gas 4 20
J. U. Bartley, Wood Oil 5..... dry
Lucinda Crowe, C. E. Daugherty & Co. 13 25
Oat Neel, C. E. Daugherty & Co. 2.... 2
Nannie J. Brown, Chicago Petroleum Synd. 1 25
Nannie J. Brown, Chicago Petroleum Synd. 2 60
Guenther-Gant 114a, Chicago Petroleum Synd. 2 ..... dry
Joe B. Ellis, Loman Oil 4 20
Joe B. Ellis, Loman Oil 5 10
E. L. Farmer, C. A. Leeper 1 ..... dry
H. D. Brown, C. A. Leeper 4 10
J. S. Collier, C. A. Leeper 2 10
Monroe Collier, Leeper Oil 2 30
Ellis & Heplin, Ohio Oil 1 15
Ellis & Heplin, Ohio Oil 3 10
Bert Thompson, Spice Knob Oil 6.... 5
O. T. Burdette, Vulon Oil 10 5
Allie Evans, Butte Dredging 2 ..... dry
E. L. Farmer, Boyles & Co. 1 ..... dry
Wells completed 28
Production 365
Dry 9

CUMBERLAND-MUNROE COUNTIES

Sulphur Creek—A. A. Huddleston, Southern Producers 10 40

SIMPSON COUNTY

Franklin—John Price, McMullen & Riegel 3 5

CLINTON COUNTY

Wolfe River—J. H. & J. J. Pierce, Mc-Clintock & Co. 1 240
Ed Upchurch, Clinton Oil 1 408
Wells completed 2
Production 648

EASTERN DIVISION
WAYNE COUNTY

District 2—Jas. Dabney, Superior Oil 13 3
T. T. Davis, Vulcan Oil 18 ..... dry
District 3—Alfred Cooper, Bell & Back 13 dry
District 13—Mrs. James Catron, Burt F. Edwards & Co 2..... dry
Wells completed 4
Production 3
Dry 3

LEE-OWSLEY COUNTIES

District 18—Flahaven Land, Ohio Oil 82 5
Flahaven Land, Ohio Oil 83..... 5
Wells completed 2
Production 10

ESTILL COUNTY

District 7—Malissa Rogers, Mt. Springs Oil 3 ..... dry
C. B. Howell, C. B. Howell, Trus. 4.. dry
District 8—Wm. Neal, Wood Oil 9..... 10
Wm. Neal, Wood Oil 10 12
S. M. Maple, Reno Oil 8 10
Simp Horn, Superior Oil Corp 12..... 10
Simp Horn, Superior Oil Corp. 15.... 10
Simp Horn, Superior Oil Corp. 16.... 8
Simp Horn, Superior Oil Corp. 17.... 12
Simp Horn, Superior Oil Corp. 18.... 10
Simp Horn, Superior Oil Corp. 19.... 12
Green Campbell, Superior Oil Corp 7. dry
Wells completed 12
Production 94
Dry 3

WOLFE COUNTY

District 6—Spencer hrs., Petroleum Exploration 4 25

LAWRENCE-JOHNSON COUNTIES

District 22—Caney Sparks, Swiss Oil Corp. 13 10
R. N. Sparks No. 1, Swiss Oil Corp. 10 10
J. N. Sparks, Garrison & Townsend 10 3
L. T. Sparks, Garrison & Townsend 11 5
District 22-a—Sanford Lyon, Swiss Oil Corp. 32 25
C. K. Dobyns No. 1, Swiss Oil Corp. 22 8
M. E. Ferguson, Swiss Oil Corp. 14.. 13
Jesse Lyons, Keaton Oil & Gas 32.... 12
District 32—P. P. Holbrook, Swiss Oil Corp. 45 15
Proctor Sparks, Swiss Oil Corp. 32 10
Esta Walters, Wheeler-Watkins Oil & Gas 3 5
District 33—J. M. Fyffe, Swiss Oil Corp. 21 7
George Evans, Swiss Oil Corp 20..... 5
Wells completed 13
Production 128

JOHNSON-MAGOFFIN COUNTIES

District 25—L. C. Bailey, Cumberland Petroleum 42 10
District 27—Ben McCormich, Burton Fork Oil 9 5
District 29—Yearne Hale, R. G. Gillespie Estate 4 15
Oscar Wheeler, Hudson & Collins 11. 10
Oscar Wheeler, Hudson & Collins 12. 8
District 31—B. F. Whitt No 2, Hupp, Duff & Co. 1 30
Boyd Bailey, Oliver Jenkins 1..... dry
Salyer hrs., Oliver Jenkins 9 25
Wells completed 8
Production 103
Dry 1

FLOYD-KNOTT COUNTIES

District 21—John Ambargy, Distill-Martin Oil & Gas 1..... gas

MORGAN COUNTY

District 6—Craney Creek Dome, Petroleum Exploration 1 ..... dry

ELLIOTT COUNTY

District 34—I. M. Ison, Edra Lee Oil & Gas 3 3

TENNESSEE
CLAY COUNTY

Mill Creek—Lem Cunningham, John H. McClurkin 1 500

WARREN COUNTY
Rig

Bowling Green—Worden, C. B. Tannehill 2.

Wells Drilling

Bowling Green—Keller, Alf. F. Hughes 1.
Covington Blk. 7, Wm. Zimmer 16.
Allen Manning, H. W. Teague & Co. 4.
Jas. Deathridge, A. B. Hudson Atty. 3.
Chas. Cox, A. T. Bannon 18.
Handley-Walters, W. Roy Hogan 2.
R. C. Smith, H. V. Taylor Atty. 18.
Ora S. Davenport 25, Ruther Turner 5.
Besse Snell Clark, New Domain Oil & Gas 5.
Geo. Perkins, C. P. Tannehill 1.
J. W. Pugh, Geo. McGinley 22.
Georgianna Davenport, T. A. Sheridan 6.
Rigs, 1; wells drilling, 12; total, 13.

ALLEN COUNTY
Wells Drilling

Scottsville—W. M. Hall, Reaher & Co. 1.
John Farley, Reaher & Co. 1.

Lon Oliver, Cyphus & Harley 5.
S. & K. Thratton, Vic DeCaigney 7.
E. Newman, Bastress & Co. 3.
Dink Britt, Bastress & Co. 9.
Angel Meredith, G. W. Hahn 11.
Frank Gibson, O. M. Widdowson 6.
J. W. Frost, W. G. Moorman, Rec. 14.
E. D. Morehead, Steuenrack & Co. 5.
L. S. Barlow, M. L. Herpolsheimer 1.
Dora B. Corbitt, Stinson & Co. 5.
Andy Smith, Lackawanna Producing 32.
I. Strait, Miller & Co. 1.
I. P. Hill, F. J. Tapp 13.
Wells drilling, 15.

BARREN COUNTY
Wells Drilling

Emery-Moore Pool—Marshall, Unknown 1.
Howard, Fred C. Moore 13.
Wilson, Phil Kopel 4.
W. E. Steffey, Seams & Co. 4.
W. E. Steffey, Ruby Oil & Gas 8.
Hall Baker Pool—McGuire, R. A. Stohr 1.
Hutcherson, Wood Oil 1.
R. E. Evans, Harrington & Norris Bros. 12.
Gorby Pool—Richardson, Lew J. Emery, Jr. Sons. 3.
Dickens, Lew J. Emery, Jr., Sons 3.
Jim Jones, Lew J. Emery, Jr., Sons 8.
Everett, Kopel Oil 2.
Ralston, Sanson & Bowers 1.
Dearing, Watson Oil 3.
T. L. Gorby, Hepler & Gorby 6.
Lessenberry, T. L. Gorby & Co. 3.
M. S. Chamberlain, Houchins Leasehold 3.
Hatfield, J. J. Sayre 5.
Beaver Creek—Maddox hrs., Harrington & Norris Bros. 2.
Duff, Consolidated Gas 13.
Knob Road—Harrison, Wiggins & Gillespie 4.
Richardson, Star Oil & Gas 11, 12.
Dauter Bros. Ziegler Bros. 3.
Tompkinsville Road—Mattis, Baker & Co. 1.
Lecta Pool—Spencer, Wiggins & Gillespie 1.
Bunch, Lew J. Emery, Jr., Sons 1.
Morgan, Baird & DeCaigney 4.
Grady, Coombe & Co. 4.
Richardson Pool—Davidson, Houchins Leasehold 4.
Oil City Pool—Allen, Lew J. Emery, Jr., Sons 1.
Etoil Area—C. S. Spradlin, Wood Oil 1.
Greer, Wood Oil 1.
Wells drilling, 33.

OWENSBORO DISTRICT
(Hancock-Ohio-Daviss Counties)

Owensboro—J. T. Trodgen, Johnson & Engel 1.
Will Howard, Petroleum Extraction 1.
Cicero Whittenhill, Lew J. Emery, Jr., Sons 1.
W. S. Gabbard, Bert Thompson 3.
Laura Mercer 108, Penna-Indiana Oil 2.
Laura Mercer 84, Penna-Indiana Oil 9.
J. L. Phillips, Penna-Indiana Oil 4.
C. A. Kelly, Penna-Indiana Oil 4.
Howard, White Plains Oil & Gas 1.
J. B. Ellis, White Plains Oil & Gas 5.
W. T. & E. Bickett, C. E. Daugherty & Co. 3.
Drane-Owens, Wood Oil 1.
Pegram, C. C. Chrysler & Co. 1.
J. A. Greer 100, C. A. Leeper 2.
H. D. Brown 205, C. A. Leeper 5.
M. Coleman, Thompson & Tremor 2.
Pegram 70, Boyles, Pokers & Co. 1.
L. E. Crowe, C. E. Daugherty & Co. 14.
L. Crowe 50, Miller & Dameron 1.
Daly, Ohio Oil 1.
Lonzo Crowe, Ohio Oil 1.
Ambrose, Rex-Pyramid Oil 1.
J. U. Bartley, Wood Oil 6.
Wells drilling, 23.

CUMBERLAND-MONROE COUNTIES
Rigs

Crocus Creek—Sand Lick, Berthold & Waddle 1.
T. Baker, Baird & Hickman 2.
Wells Drilling
Crocus Creek—E. H. Brockman, Wood, Haislet & McLennon 3.
Fulton Gridar, Baird & Hickman 3.
Patterson, Phillippi & Co. 1.
Hi Jackman, Crawford & Co. 1.
Sadie Bledso, J. E. Bolinger 1.
Elliott, Crawford & Co. 2.
Sulphur Creek—Davidson, Wilcox Bros. 1.
J. B. Riddle, Hook & McComas 2.
West Fork—C. T. Cheatham, Alta Oil 3.
Bear Creek—J. A. Dickens, E. M. Treat & Co. 7.
Steel Fork—Sarah Shackler, Wilcox Bros. 5.
Kettle Creek—R. L. Blythe, Connell, Zook & Co. 2.
J. Jones, Graves Bros. & Co. 1.
Pulsey Creek—T. B. Hogan, W. S. Raydure & Co. 1.
Rigs, 2; wells drilling, 14; total, 16.

SIMPSON COUNTY
Wells Drilling

Franklin—Holeman, Lincoln Oil Producing 3.
J. H. Pugh, Geo. McGinley 22.
Wells drilling, 2.

CASEY COUNTY
Rig

Near Avon—T. B. Hammonde, Col. Less Combest 1.
Wells Drilling
Dunville—Ben Russell, Irwin & Anschutz 1.
Rig, 1; well drilling, 1; total, 2.

CLINTON COUNTY
Wells Drilling

Wolfe River—Ed Upchurch, Clinton Oil 2.
Pierce Bros., McClintock & Co. 2.
Lillydale—Jane Scott, Owens, Long & Co. 1.
Shipley hrs., Delaney, Ewing & Co. 1.
Wells drilling, 4.

CHRISTIAN COUNTY
Well Drilling

Wildcat—W. E. Denton, Petroleum Exploration 1.

EASTERN DIVISION
WAYNE COUNTY
Wells Drilling

District 2—Miller Bros., Wood Oil 65.
District 5—D. C. Denney, O. M. Carter 1.
District 13—Nancy L. Jones hrs., W. L. Souther 3.
Wells drilling, 3.

LEE-OWSLEY COUNTIES
Wells Drilling

District 18—Wylie Bryant, Cook & Co. 2.
District 18-b—J. B. Scott, Petroleum Exploration 1.
District 35—Delina McGuire, S. S. Yantis & Co. 3.
H. D. Parrish, H. B. Sipple 3.
District 36—Thos. Foreman, Rex-Pyramid Oil 1.
Thos. Foreman, Standard Oil of Ky. 1
Thos. Foreman, C. B. Groves, Trustee, 2.
Baker, Watkins & Co. 1.
Drain hrs., Henry Oil 1.
Wells drilling, 9.

POWELL COUNTY
Well Drilling

District 16—John A. Rogers, W. O. Dunham 6.

ESTILL COUNTY
Wells Drilling

District 7—John Bill Rogers, Mt. Springs Oil 14.
District 8—Millard Ballard, Reno Oil 8.
Oscar Tipton hrs., Reno Oil 8.
S. M. Maple, Reno Oil 9.
Wm. Neal, Wood Oil 11.
Simp Horn, Superior Oil Corp. 20, 21, 22.
Chas. Mitchell, Brenner & Adams 1.
Wells drilling, 9.

LAWRENCE-JOHNSON COUNTIES
Wells Drilling

District 22—W. W. Bailey, Garrison & Townsend 6.
John M. Sparks, Holland & Wade 5.
District 22-a—Martha Kelly, Swiss Oil Corp. 15.
C. K. Dobyne No. 1, Swiss Oil Corp. 23.
Jess Lyons, Keaton Oil & Gas 33.
District 32—J. J. Gamlill, Swiss Oil Corp. 44.
P. P. Holbrook, Swiss Oil Corp. 46.
District 33—J. M. Fyffe, Swiss Oil Corp. 22.
Geo. Evans, Swiss Oil Corp. 21.
Nora Lemasters, J. N. Meek, Trus., 4.
Wells drilling, 10.

JOHNSON-MAGOFFIN COUNTIES
Rigs

District 25—W. H. Collins, Petroleum Exploration 3.
District 27—Eliza Powers, Clyde Oil 6.
Bailey hrs., Cobb & Lucas 7.
Wells Drilling
District 25—Gardner Blanton, Atlantic Oil Prod. 22.
District 27—Cholly Conley, Ky-Indiana Oil Trust 7.
Sam Williams, S. J. Patrick 1.
U. M. Prater 4-a, Structure Oil 1.
District 29—W. H. Conley, Bed Rock Petroleum 30.
Mary Burke, R. G. Gillespie Estate 7.
J. H. Gardner, New Domain Oil & Gas 14.
A. A. Almy, Cumberland Petroleum 7.
District 30—Sam Blanton, R. G. Gillespie Estate 20.
Lee Owens, Oliver Jenkins 2.
Bracken hrs., Phillips & Yough 4.
F. M. Tackett, F. M. Tackett 2.
Pelphrey hrs., Pelphrey Heirs 2.
District 31—W. E. Patrick, Bed Rock Petroleum 5.
J. H. Arnett, Bed Rock Petroleum 24.
H. H. May, South Fork Oil 9.
B. F. Whitt No. 1, Hupp, Duff & Co. 2.
B. E. Whitt No. 2, Hupp, Duff & Co. 2.
H. B. Adams Sr., Oliver Jenkins & Co. 3.
Rigs, 3; wells drilling, 19; total, 22.

FLOYD-KNOTT COUNTIES
Wells Drilling

District 21—Mouse Martin, Ohio Fuel Oil 3.
Mary Martin, Louisville Gas & Electric 3.
S. C. Allen, Eastern Carbon Black 2.
George Gearhart, Midas Gas 3.
Andy Coburn, Louisville Gas & Electric 1.
Wells drilling, 5.

KNOX COUNTY
Wells Drilling

Bailey Switch—Dizney, Dizney & McKee 1.
Sinking Creek—Foreman, Foreman Lumber 1.
Red Bird Creek—Beattyville parties 1.
Wells drilling, 3.

MORGAN COUNTY
Wells Drilling

District 6—T. L. Elam, Popping Rock Oil 2.
West Liberty—Pleasant Run, Jim Patton 1.
Blair Mills, Collier & Co.
Wells drilling, 3.

ELLIOTT COUNTY
Rig

District 34—D. A. Lewis, Smith & Garrison 2.
Wells Drilling
Lincoln Creek—Joe Wagner, J. McDonald 1.
Rocky Branch—Henderson, Eastern Gulf Oil 1.
Rig, 1; wells drilling, 2; total, 3.

MENIFEE COUNTY
Wells Drilling

Leatherwood—Widow Reed, McKinney Bros. 1.
Hamp Rawlins, W. O. Bach 3.
Wells drilling, 2.

LAUREL COUNTY
Well Drilling

10 Miles West of London—Standard Oil of Kentucky 1.

JACKSON COUNTY
Well Drilling

McKee—Isaac, Standard Oil of Ky. 1.

GREENUP COUNTY
Well Drilling

Greenup—J. H. Flannery, Petroleum Exploration 1.

CARTER COUNTY
Wells Drilling

Smokey Creek—Hi Owens, R. A. Chiles 1.
Through Camp Creek—Robbins & Watson 1.
Limestone—Carpenter hrs., Hovis, Young & Marcum 1.
Wells drilling, 3.

McCREARY COUNTY
Wells Drilling

McCreary—McCreary Oil & Gas 1.
Pleasant Creek—Asher, Sampson & Co. 1.
Wells drilling, 2.

TENNESSEE
CLAY COUNTY

Clark Pool—J. M. Gray, H. Z. Clark & Co. 2.
A. T. Davis, Dixon, Blayless & Douglass 3.
Lillydale—G. M. Gamewell, Owens, Long & Co. 1.
Celina—Geo. Plumley, John B. Kerr 1.
Geo. Tinsley, Lewis & George 1.
Timothy—Leech & Hunt 1.
Turkey Creek—Potter, Mendenthall & Co. 1.
Fox Springs—Myers, Owens, Long & Co. 1.
Willow Grove—Widow Hargrave, Carnahan & Horn 2.
Jim Stover, A. A. Alexander & Co. 2.
Wells drilling, 10.

MORGAN COUNTY
Wells Drilling

Sunbright—Somers, Cockrell & Co. 1.
Glades, Knoxville parties 1.
Russell, Russell Producing 7.
Wells drilling, 3.

OVERTON COUNTY
Wells Drilling

Livingstone—Monroe Anticline, Helsey & Elder 1.
Copeland Cove Anticline, H. R. Guard 1.
Wells drilling, 2.

MISSISSIPPI
FRANKLIN COUNTY
Rig

Jackson—Pearl River, New York parties 1.

COPIAH COUNTY
Rig

Hazelhurst—Brandywine, B. W. White 1.

HOLMES COUNTY
Rig

Coxburg—Sec. 18-31-1, Freerun Oil 1.

LEAKE COUNTY
Rig

Near Conway—Chas. N. Haskell 1.

KOSCIUSKI COUNTY
Rig

At Alta—B. B. Jones 1.

CLAIBORNE COUNTY
Wells Drilling

West Side of County—Michael Zink 1.
Sec. 5-11-2—Young, Mississippi Exploration 1.
Wells drilling, 2.

YAZOO COUNTY
Well Drilling

Sec. 25-13-1w—Reed, Wilkins & Burns 1.

HINDS COUNTY
Well Drilling

Jackson—Reeder, Johnson Oil 1.

WASHINGTON COUNTY
Well Drilling

Sec. 30-14-9—Glen Allens-Williams, Alhambra Oil 1.

TISHOMINGO COUNTY
Well Drilling

Iuka—Unknown 1.

TALLAHATCHIE COUNTY
Well Drilling

Sec. 23-25-2—Harvey, Shreveport parties 1.

MARSHALL COUNTY
Well Drilling

Sec. 3-32-3—Hoffman, Tom Slick, 2.

MADISON COUNTY
Well Drilling

Unknown—Transcontinental Oil 1.

STONE COUNTY
Well Drilling

Sec. 36-3-12—30 miles west of Gulfport, Local Capital 1.

ALABAMA
MORGAN COUNTY
Well Drilling

Sec. 6-6-4—Enelleh, Decatur Oil 1.

HALE COUNTY
Well Drilling

Greensburg—Hale Oil 1.

SHELBY COUNTY
Well Drilling

Chelsea—Scott, Cooksey & Co. 1.

WILSON COUNTY
Well Drilling

Selma—Blue Belle Oil 1.

FLORIDA
PASCO COUNTY
Rig

Sec. 20-25-16e—North Tarpon Springs, Green 1.

OKEECHOBEE COUNTY
Rig

Section 22-36-36—Opal District, Preston & Gaines 1.

HERNANDO COUNTY
Rig

Sec. 20-23-19—Ayers, near Brooksville 1.

MONROE COUNTY
Rigs

Sec. 6-55-31—Florida Natural Resources 1.
Sec. 6-35-37—Biscayne Oil & Gas Co. 1.
Rigs, 2.

MANATEE COUNTY
Rig

Sec. 15-34-17—Robinson, Speedwell Petroleum Synd. 1.

DADE COUNTY
Well Drilling

West of Miami—Tamiami Trail, Miami Oil & Nat. Gas Corp. 1.

LEON COUNTY
Wells Drilling

Section 11-2-1e—Rhodes, Gulf Production Corp. 2.

POLK COUNTY
Wells Drilling

Section 4-32-27—West Frostproof Land & Oil 1.

JEFFERSON COUNTY
Wells Drilling

Section 19-2-5e—Miller-Gossard, Southern States Oil Corp. 1.

GLADES COUNTY
Wells Drilling

Section 15-39-32—Brewton, H. McCurdy 1.
Section 5-38-32—Langford & Co. 2.
Section 3-38-32—Seminole Petroleum Corp. 3.
Rigs, 0; wells drilling, 3; total, 3.

LEGAL

TRIBAL OSAGE OIL LEASES AT PUBLIC AUCTION, SEPTEMBER 30, 1926, BY UNITED STATES GOVERNMENT

September 30, 1926, at Pawhuska, Oklahoma, about 35,580 acres will be offered for oil leases in quarter section tracts. Bids will be for bonus in addition to royalties, 25% payable on day of sale, balance in three annual installments, with acceptable security. Within advertised area there are about 9,615 oil wells producing from 1 barrel to 1,000 barrels each, the total daily production for June, 1926, being about 70,000 barrels; also, there are about 135 wells drilling. All lands are now leased separately for gas. Blue print maps of area advertised, showing tracts producing oil or gas, can be had for 50 cents each, also logs of producing oil or gas wells for 25 cents each well. Write U. S. Superintendent, Osage Agency, Pawhuska, Oklahoma, for maps, logs or other information.

The Seeds for the Flowers That Blossomed in June Were Planted in April!

Plan to get your share of the big autumn and winter business by advertising in the Classified Section of The Oil and Gas Journal.

More than 25,000 oil men read it every week in oil fields, refineries, gasoline plants, supply stores, pipeline stations and offices of producers, refiners, marketers, natural gasoline manufacturers and exporters everywhere.

Classified advertising is very reasonable—35 cents a line for the first time and 25 cents a line for each following time. Six words usually make a line.

Mail your ad now so that the thousands of oil men who read next week's issue will be favorably impressed with your offer, product or service.

The Oil and Gas Journal
Tulsa, Okla.

"America's Greatest Petroleum Publication"

WHAT AND WHERE TO BUY

A Classified Index of Advertisers in This Publication

For Alphabetical Index See Page 25

A

Absorption Plant Equipment—
American Radiator Co.
Braun, C. F., & Co.
Campbell, J. A.
Cooper, C. & G., Co.
Griscom-Russell Co.
National Gas Products Co.
Newton Process Mfg. Co.
Ross Heater & Mfg. Co., Inc.
Southwestern Engineering Co., Inc.
Southwestern Engineering Corp.

Absorption Towers—
Hope Engineering & Supply Co.
National Gas Products Co.
Newton Process Mfg. Co.

Acetylene Apparatus—
Oxweld Acetylene Co.

Acetylene—Dissolved—
Prest-O-Lite Co., Inc.

Acetylene in Cylinders—
Prest-O-Lite Co., Inc.

Agitators—
Kaw Steel Construction Co.
Petroleum Iron Works Co.

Alloy Steel (See Steel—Alloy)—

All-Steel Drilling Rigs (See Rigs)

Aluminum Bronze Powder for Paint—
Aluminum Co. of America.

Amonia—
Mathieson Alkali Works, Inc.

Anchor Clamps (See Clamps)—

Antimonial Leads—
Eagle-Picher Lead Co.

Apparatus—Electric—
Westinghouse Electric & Mfg. Co.

Apparatus—Motor Control—
Westinghouse Electric & Mfg. Co.

Appraisers—
American Appraisal Co.

Arches—Flat Suspended—
Brady Conveyors Corp.

B

Babbitts—
Eagle-Picher Lead Co.
National Lead Co.
Ryerson, Jos. T., & Sons, Inc.

Back Up Tongs (See Tongs)—

Bailers—
Oil Well Supply Co.
Spang & Co.

Balls and Seats—
Axelson Machine Co.
Hough, Charles N., Mfg. Co.
Norris Brothers, Inc.
Northrup Equipment Co.

Balls—Bronze—
Atlas Ball Co.
Hoover Steel Ball Co.

Balls—Steel—
Atlas Ball Co.
Hoover Steel Ball Co.
Strom Steel Ball Co.

Band Wheels—Steel—
International Derrick & Equipment Co.
Marion Mch., Fdy. & Supply Co.
Moore, Lee C., & Co., Inc.
Parkersburg Rig & Reel Co.

Barrels—
Petroleum Iron Works Co.

Barytes—
National Pigments & Chemical Co.

Batteries—
National Carbon Co.

Bearings—Roller—
American Roller Bearing Co.
Timken Roller Bearing Co.

Bearings—Thrust—
Timken Roller Bearing Co.

Belting—
Bridgeport Machine Co.
Continental Supply Co.
Fenwick-Reddaway Mfg. Co.
Frick-Reid Supply Co.
Imperial Belting Co.
International Supply Co.
Murray Rubber Co.
Stanley Belting Corp.

Belting—Rubber—
Bovaird Supply Co.
Goodyear Tire & Rubber Co.
United States Rubber Co.

Bits—Disc—
U. S. Tool Co.

Bits—Fish Tail—
Federal Supply Co.
Lucey Mfg. Corp.

Bits—Rotary Disc—
Hughes Tool Co.

Bits—Rotary Rock—
Hughes Tool Co.
Reed Roller Bit Co.

Bit Steel (See Steel—Bit)—

Bleaching Powder—
Mathieson Alkali Works, Inc.

Blow-Off Valves (See Valves)—

Blowout Preventer—
Regan Forge & Engineering Co.
Stearns-Roger Mfg. Co.

Blowpipes—
Oxweld Acetylene Co.

Boiler Feed Pumps (See Pumps)

Boilers—Horizontal Return Tubular—
Brownell Co., The
Kewanee Boiler Co.
Vogt, Henry, Machine Co.

Boilers—Oil Country—
Bovaird & Seyfang Mfg. Co.
Bridgeport Machine Co.
Brownell Co., The
Coatesville Boiler Works.
Continental Supply Co.
Donovan Boiler Works
Frick-Reid Supply Co.
International Supply Co.
Kewanee Boiler Co.
Lucey Mfg. Co.
National Supply Co.
Oil Well Supply Co.
Pattin Bros. Co.
Republic Supply Co.
Titusville Iron Works.

Bolted Tanks (See Tanks)—

Bolts and Nuts—
Sheffield Steel Corp.

Bolt Threading Machines—
Landis Machine Co.

Bottles—Glass—
Illinois Glass Co.

Box and Pin Steel—
Andrews Steel Co.
Heppenstall Forge & Knife Co.

Braces—Tool—
Dunn Mfg. Co.

Brick—Fire—
Pilbrico Jointless Firebrick Co.

Briquette Machines—
Porter & Company.
Simplex Equipment Co.

Bronze Valves (See Valves—Brass and Bronze)—

Buildings—Metals, Sectional (All Types)—
Austin Co.
Blaw-Knox Co.
Braden Co.
Butler Mfg. Co.
International Derrick & Equipment Co.
Marion Mch., Fdy. & Supply Co.
Truscon Steel Co.

Bulk Station Tanks (See Tanks)—

Bull Ropes—
Ajax Rope Co.
Columbian Rope Co.
Plymouth Cordage Co.
Wall Rope Works, Inc.

Bull Wheels—Steel—
International Derrick & Equipment Co.
Marion Mch., Fdy. & Supply Co.
Moore, Lee C., & Co., Inc.
Parkersburg Rig & Reel Co.

Burners—Gas—
Eureka Burner Co.

Burners—Oil—
Continental Supply Co.
Reid, Joseph, Gas Engine Co.

Bushings—Rotary Drive—
Wilson Oil Tools Corp.

C

Cable Bit Steel—
Andrews Steel Co.
Federal Supply Co.
Heppenstall Forge & Knife Co.

Cables—Drilling, Manila—
Ajax Rope Co., Inc.
Columbian Rope Co.
Continental Supply Co.
Frick-Reid Supply Co.
Plymouth Cordage Co.
Wall Rope Works, Inc.

Cables—Steel—
Ajax Rope Co., Inc.
Black Steel & Wire Co.
Broderick & Bascom Rope Co.
Continental Supply Co.
Frick-Reid Supply Co.
Hazard Mfg. Co.
Leschen, A., & Sons Rope Co.
Murray Tool & Supply Co.
National Supply Co.
Republic Supply Co.
Wickwire-Spencer Steel Corp.
Williamsport Wire Rope Co.

Calf Rope—
Ajax Rope Co., Inc.

Calf Wheels—Steel—
International Derrick & Equipment Co.
Moore, Lee C., & Co., Inc.

Cannon—Oil Field—
Braden Co.

Cans—Water—
Gott, H. P., Mfg. Co.

Capping Steel—
Andrews Steel Co.

Carbon—Black Diamond—
Diamond Drill Carbon Co.
Patrick, R. S.

Cars—Tank—
American Car & Foundry Co.
General American Tank Car Corp.
Shippers' Car Line, Inc.

Cars—Tank, Leased—
American Car & Foundry Co.
North American Car Co.
Shippers' Car Line, Inc.

Casing—
Bovaird Supply Co.
Central Tube Co.
Continental Supply Co.
Emsco Derrick & Equip. Co.
Jarecki Mfg. Co.
National Supply Co.
National Tube Co.
Pittsburgh Steel Products Co.
Reading Iron & Steel Co.
South Chester Tube Co.
Spang, Chalfant & Co., Inc.
Superior Tube Co.
Wheeling Steel Corp.

Casing—Wrought Iron—
Byers, A. M., & Co.
Reading Iron Co.
South Chester Tube Co.

Casing Elevators (See Elevators, Casing and Tubing)—

Casing Heads—
Arbon, Paul, & Co.
Dresser, S. R., Mfg. Co.
Kansas City Hay Press Co.

Casing Lines—
Ajax Rope Co., Inc.
Hazard Mfg. Co.

Casing Shoes—
Baker Casing Shoe Co.
Bartlesville Supply Co.
Bridgeport Machine Co.
Guiberson Corp.
Oil Well Supply Co.

Castings—Acid Proof—
Duriron Co.

Castings—Alloy Steel—
Ohio Steel Foundry Co.
Sivyer Steel Casting Co.

Castings—Chrome Nickel Steel—
Sivyer Steel Casting Co.

Castings—Corrosion Resisting Non-Ferrous—
Hills-McCanna Co.

Castings—Electric Steel—
Ohio Steel Foundry Co.
Sivyer Steel Casting Co.

Castings—Grey Iron—
Ajax Iron Works.
American Car & Foundry Co.
Gaso Pump & Burner Mfg. Co.
Pittsburgh Boiler & Machine Co.

Castings—Steel—
Ajax Iron Works.
Chicago Steel Foundry Co.
Ohio Steel Foundry Co.
Sivyer Steel Casting Co.

Cement—Fire and High Temperature—
General Insulating & Mfg. Co.

Chains—Conveying—
Chain Belt Co.
Link-Belt Co.

Chains—Oil Well—
Baldwin Chain & Mfg. Co.
Chain Belt Co.
Link-Belt Co.

Chains—Power Transmission—
Baldwin Chain & Mfg. Co.
Chain Belt Co.
Link-Belt Co.

Chemical Treatment Crude Oil Emulsion—
Barnickel, Wm. S., & Co.

Chlorine—Liquid—
Mathieson Alkali Works, Inc.

Circulating Heads—
Wilson Oil Tools Corp.

Clamps—Anchor—
Bartlesville Supply Co.

Clamps—Belt—
Federal Supply Co.

Clamps—Collar Leak—
Dayton Pipe Coupling Co.
Dresser, S. R., Mfg. Co.

Clamps—Drilling—
Western Supply Co.

Clamps—Hoisting—
Newton Process Mfg. Co.

Clamps—Pipe—
Dayton Pipe Coupling Co.
Dresser, S. R., Mfg. Co.

Clamps—River—
Dresser, S. R., Mfg. Co.
Gaso Pump & Burner Mfg. Co.

Cloths—Wiping—
Nye Tool & Machine Works.

Clutches—Friction, Plate Type—
Twin Disc Clutch Co.

Cocks—Brass & Iron—
Lunkenheimer Co.
Walworth Co.

Cocks—Plug—
Homestead Valve Mfg. Co.

Cocks—Plug, Acid Proof—
Duriron Co.

Cocks—Water Gauge—
Shaffer, J. E., Co.
Smith Separator Co.

Coils and Bends—Pipe—
Harrisburg Pipe & Pipe Bending Co.
Midwest Pipe & Supply Co.

Compounds—Boiler—
Dearborn Chemical Co.

Compounds—Cement, Quick Setting—
Sullivan Co.

Compounds—Joint Sealing—
Key Boiler Equipment Co.

Compounds—Oil Well Cleaning—
Sullivan Co.

Compressed Air Process—
Air Cleaning & Reaming Corp.

Compressor Cylinders (See Cylinders—Compressor)—

Compressors—Air—
Bessemer Gas Engine Co.
Clark Brothers Co.
Cooper, C. & G., Co.
Gardner Governor Co.
Ingersoll-Rand Co.
Sullivan Machinery Co.

Compressors—Ammonia—
Carbondale Machine Co.
Cooper, C. & G., Co.

Compressors—Direct Connected Motor and Gas Engine Driven
Buffalo Gasolene Motor Co.
Clark Brothers Co.
Cooper, C. & G., Co.
Miller Improved Gas Engine Co.

Compressors—Direct Driven Air and Gas—
Bessemer Gas Engine Co.
Miller Improved Gas Engine Co.

Compressors—Gas—
Bessemer Gas Engine Co.
Chicago Pneumatic Tool Co.
Clark Brothers Co.
Cooper, C. & G., Co.
Hope Engineering & Supply Co.
Ingersoll-Rand Co.
National Transit Pump & Machine Co.
Worthington Pump & Machinery Corp.

Compressors—Oil—Coke—
Porter & Company.

Condenser Boxes—
Kaw Steel Construction Co.
Petroleum Iron Works Co.

Condensers—
American Radiator Co.
Chicago Pneumatic Tool Co.
National Gas Products Co.
Ross Heater & Mfg. Co.
Southwestern Engineering Co., Inc.
Southwestern Engineering Corp.

Controllers—Automatic—
Brown Instrument Co.

Controllers—Liquid Level—
Fisher Governor Co., Inc.
Newton Process Mfg. Co.
Smith Separator Co.

Controllers—Pressure—
Smith Separator Co.

Controllers—Temperature—
Foxboro Co., Inc.

Conveying & Elevating Machinery
Brady Conveyors Corp.

Conveyors—Bucket and Belt—
Brady Conveyors Corp.

Conveyors—Pneumatic—
Brady Conveyors Corp.

Conveyors—Portable Belt—
Barber-Greene Co.

Cooling Towers—Atmospheric—
Braun, C. F., & Co.
National Gas Products Co.

Cordage—
Bridgeport Machine Co.
International Supply Co.
Plymouth Cordage Co.

Core Drilling—
Longyear, E. J., Co.
Mineral Exploration Co.

Core Drills—
Elliott Core Drilling Co.

Core Drills—Diamond—
Longyear, E. J., Co.
Sullivan Machinery Co.

Core Drills—Diamonds For—(See Diamonds for Core Drilling)

Coring Tools—
Reed Roller Bit Co.
Wilson Oil Tools Corp.

Couplings—Flexible—
Nuttall, R. D., & Co.
Victaulic Co. of America.

Couplings—Plain End Pipe—
Dayton Pipe Coupling Co.
Dresser, S. R., Mfg. Co.

Couplings—Seamless Steel—
Harrisburg Pipe & Pipe Bending Co.
Superior Tube Co.

Couplings—Steel for Casing, Line Pipe, Drill Pipe and Tubing—
Dayton Pipe Coupling Co.
Smith, A. O. Corp.

Cracking Processes—
Graver Corp.
Kellogg, M. W., Co.
Universal Oil Products Co.

Crawler Threads—
Belle City Mfg. Co.
Full Crawler Co.

Crown Blocks—
International Derrick & Equipment Co.
Lucey Mfg. Corp.
Moore, Lee C., & Co., Inc.
Parkersburg Rig & Reel Co.

Cups—Composition—
Williamsport Development Co.

Cups—Leather—
Auer, C. A.

Cutters—Pipe—
Borden Co.
Nye Tool & Machine Works.
Trimont Mfg. Co.

Cylinders—Compressor—
Hope Engineering & Supply Co.

Cylinder Stocks—
Barnsdall Refining Co.
Pure Oil Co.
Texas Company, The.

D

Dehdrating Process—
Barnickel, Wm. S., & Co.

Dephlegmators—
Graver Corp.
National Gas Products Co.
Newton Process Mfg. Co.
Smith, A. O., Corp.

Depletion Reports—
American Appraisal Co.

Derricks—Steel—
Emsco Derrick & Equip. Co.
International Derrick & Equipment Co.
Marion Mch., Fdy. & Supply Co.
Moore, Lee C., & Co., Inc.
O'Brien Steel Construction Co.
Parkersburg Rig & Reel Co.
Superior Tube Co.

Derricks—Turnbuckle—
National Turnbuckle Derrick Co.

Diamonds—For Core Drilling—
Patrick, R. S.

Die Heads—Automatic Screw Cutting—
Landis Machine Co.

Die Heads—Bolt Threading—
Bignall & Keeler Mch. Works.
Landis Machine Co.

Die Heads—Stationary Pipe Threading—
Bignall & Keeler Mch. Works.
Cox & Sons Co., The.
Landis Machine Co.

Diesel Engines (See Engines)—

Dies—Pipe Threading—
Bignall & Keeler Mch. Works.
Cox & Sons Co., The.
Landis Machine Co.
Nye Tool & Machine Works.

Direct Driven Pumps (See Pumps)

Disc Bits (See Bits—Disc)—

Ditchers—Pipe Line—
Barber-Greene Co.
Buckeye Traction Ditcher Co.

Draw Works—
Lucey Mfg. Corp.
National Supply Co.
Titusville Iron Works Co.

Drillers Hose (See Hose)—

Drilling & Fishing Tools—
Acme Fishing Tool Co.
Baash-Ross Tool Co.
Bovaird & Seyfang Mfg. Co.
Bovlard Supply Co.
Bridgeport Machine Co.
Brown Tool Co., Inc.
Burns Tool Co.
Continental Supply Co.
Cushing, Tim, Tool & Supply Co.
Emsco Derrick & Equip. Co.
General Oil Tools Co.
Hinderliter Tool Co.
Hughes Tool Co.
International Supply Co.
Larkin & Co.
Leidecker Tool Co.
Lucey Mfg. Corp.
Murray Tool & Supply Co.
Oil Well Supply Co.
Reed Roller Bit Co.
Regan Forge & Engineering Co.
Spang & Co.
Star Drilling Machine Co.
U. S. Tool Co.

Drilling Engines (See Engines)—

Drilling Equipment—
Clark Brothers Co.
Hughes Tool Co.
O'Brien Steel Construction Co.
Oil Well Supply Co.
Parkersburg Rig & Reel Co.
Reed Roller Bit Co.
Star Drilling Machine Co.

Drilling Machines—
Leidecker Tool Co.
Oil Well Supply Co.
Star Drilling Machine Co.

Drilling Tools (See Drilling and Fishing Tools)—

Drills—Portable Air—
Chicago Pneumatic Tool Co.

Drive Shoes—
Bartlesville Supply Co.
Larkin & Co.

Drops and Seats—
Norris Brothers, Inc.

Drums (See Barrels)—

Dynamos—
Westinghouse Electric & Mfg. Co.

E

Ejectors—
Penberthy Injector Co.

Electrical Equipment—
Fairbanks-Morse & Co.
Fyle National Co.
Wico Electric Co.

Electric Drilling Equipment—
Lucey Mfg. Corp.
Westinghouse Electric & Mfg. Co.

Electric Steel Castings (See Castings—Electric—Steel)—

Elevators—Casing and Tubing—
Bovaird Supply Co.
Bridgeport Machine Co.
Dunn Mfg. Co.
Lucey Mfg. Corp.
Oil Well Supply Co.
Wilson Oil Tools Corp.

Elevators—Rod—
B. & A. Specialty Co.
D. & B. Pump & Supply Co.
Dunn Mfg. Co.

Enamels—
Arco Company, The.
Detroit Graphite Co.
Sherwin-Williams Co.

Engineers—Consulting and Contracting—
Brooks Engineering Corp.
Hope Engineering & Supply Co.
Kellogg, M. W., Co.
McKee, Arthur G., & Co.
National Petroleum Engineering Corp.
Power Specialty Co.
Westcott & Greis.
Widdell Engineering Co.

Engineers—Fire Protection—
Brooks Engineering Corp.
Foamite-Childs Corp.

Engineers—Oil Buildings—
Austin Co.
International Derrick & Equipment Co.

Engineers—Oil Mining—
Ranney Oil Mining Co

Engineers—Oil Treating—
Barnickel, Wm. S., & Co.
National Gas Products Co.

Engines—Crude Oil—
Continental Supply Co.
Western Machinery Co.

Engines—Diesel—
Bessemer Gas Engine Co.
Busch-Sulzer Bros. Diesel Engine Co.
Foos Gas Engine Co.
McIntosh & Seymour Corp.
Western Machinery Co.
Worthington Pump & Machinery Corp.

Engines—Drilling—
Ajax Iron Works.
Bessemer Gas Engine Co.
Bovaird & Seyfang Mfg. Co.
Brownell Co., The.
Buda Co.
Buffalo Gasolene Motor Co.
Clark Bros. Co.
Climax Engineering Co.
Franklin Valveless Engine Co.
Hercules Motor Corp.
Pattin Bros. Co.
Power Mfg. Co.
Republic Supply Co.
Titusville Iron Works Co.

Engines—Gas—
Bessemer Gas Engine Co.
Buda Co.
Buffalo Gasolene Motor Co.
Chicago Pneumatic Tool Co.
Clark Brothers Co.
Climax Engineering Co.
Continental Supply Co.
Cooper, C. & G., Co.
Emsco Derrick & Equipment Co.
Foos Gas Engine Co.
Franklin Valveless Engine Co.
Frick-Reid Supply Co.
Hope Engineering & Supply Co.
Ingersoll-Rand Co.
International Supply Co.
Jones, S. M., Co.
Marion Mch., Fdy. & Supply Co
Miller Improved Gas Engine Co.
National Supply Co.
National Transit Pump & Machine Co.
Oil Well Supply Co.
Pattin Bros. Co.
Reid, Joseph, Gas Engine Co.
Titusville Iron Works Co.
Waukesha Motor Co.
Western Machinery Co.

Engines—Gasoline—
Buda Co.
Buffalo Gasolene Motor Co.
Climax Engineering Co.
Continental Motors Corp.
Fairbanks-Morse & Co.
Hercules Motor Corp.
International Harvester Co. of America.
Waukesha Motor Co.
Western Machinery Co.

Engines—Oil—
Bessemer Gas Engine Co.
De La Vergne Machine Co.
Fairbanks-More & Co.
Franklin Valveless Engine Co.
Ingersoll-Rand Co.
International Harvester Co. of America.
McIntosh & Seymour Corp.
National Supply Co.
Oil Well Supply Co.
Power Mfg. Co.
Reid, Joseph, Gas Engine Co.
Western Machinery Co.

Engines—Semi-Diesel, Oil—
Chicago Pneumatic Tool Co.

Engines—Steam—
Ajax Iron Works.
Frick-Reid Supply Co.
Lucey Mfg. Corp.
National Supply Co.
Oil Well Supply Co.

Evaporators—
Newton Process Mfg. Co.
Ross Heater & Mfg. Co., Inc.

F

Fabricators for Gasoline Plants and Refineries—
National Gas Products Co.
Stearns-Roger Mfg. Co.

Filters—Oil—
Burt Mfg. Co.

Fire Extinguishers—
Foamite-Childs Corp.

Fire Extinguishers — Recharge Service—
Foamite-Childs Corp.

Fishing Tools (See Drilling and Fishing Tools)—

Fittings—Dropped Forged Steel—
Vogt, Henry, Machine Co.

Fittings—Forged Steel—
Central Forging Co.

Fittings—Malleable & Cast Iron—
Bovaird Supply Co.
Crane Co.
Frick-Reid Supply Co.
Walworth Co.

Fittings—Pipe—
Dayton Pipe Coupling Co.
Dresser, S. R., Mfg. Co.
Gaso Pump & Burner Mfg. Co.
Jarecki Mfg. Co.
Kellogg, M. W., Co.
Kennedy Valve Mfg. Co.
Metric Metal Works.
Oil Well Supply Co.
Reading Steel Casting Co.
Republic Supply Co.
United Iron Works, Inc.
Victaulic Co. of America.
Walworth Co.

Fittings—Steel—
Dayton Pipe Coupling Co.
Kerotest Mfg. Co.
Ohio Steel Foundry Co.
Walworth Co.

Flanges—Brass, Iron and Steel—
Jefferson Union Co.
Metric Metal Works.
Walworth Co.

Flange Unions—
Dart, E. M., Mfg. Co.
Gaso Pump & Burner Mfg. Co.

Flashlights—
National Carbon Co.

Floating Roofs and Decks—
Chicago Bridge & Iron Works.

Floodlights—
Pyle-National Co.

Forging Billets—
Andrews Steel Co.
Harrisburg Pipe & Pipe Bending Co.
Heppenstall Forge & Knife Co.

Forgings—
Champion Machine & Forging Co.

Fuel Oil (See Oil—Fuel)—

Fullers Earth—
Sinclair Refining Co.

G

Gas Holders—
Chicago Bridge & Iron Works.

Gaskets—
Garlock Packing Co.
McCord Radiator & Mfg. Co.

Gaskets—Fibre—
Durabla Mfg. Co.

Gas Masks & Safety Appliances—
Mine Safety Appliance Co.

Gasoline—
Crown Central Petroleum Co.
Empire Refineries, Inc.
Gulf Refining Co.
Magnolia Petroleum Co.
Pure Oil Co.
Sinclair Refining Co.
Skelly Oil Co.

Gasoline—Natural—
Chestnut & Smith Corp.
National Gas Products Co.
Skelly Oil Co.
Warren Petroleum Co.

Gasoline Plant Equipment—
Bessemer Gas Engine Co.
Clark Brothers Co.
Kellogg, M. W., Co.
McKee, Arthur G., & Co.
National Gas Products Co.
Newton Process Mfg. Co.
Ross Heater & Mfg. Co., Inc.
Widdell Engineering Co.

Gas Regulating Casinghead—
Davis, G. M., Regulator Co.
National Gas Products Co.

Gas Scrubbers—
National Gas Products Co.
Newton Process Mfg. Co.

Gauge Glass—High Pressure—
Durabla Mfg. Co.

Gauge Poles—
Marsh Gauge Pole Co.
Missouri Woodworking Co.

Gauges—Automatic Tank—
Brooks Engineering Co.

Gauges—Draft—
Brown Instrument Co.

Gauges—Oil—
Penberthy Injector Co.

Gauges—Pressure and Vacuum—
Bristol Co.
Brown Instrument Co.
Equitable Meter & Mfg. Co.
Metric Metal Works.

Gauges—Test—
Equitable Meter & Mfg. Co.
Metric Metal Works.

Gear Driven Pumps (See Pumps)

Gears—Cut—
Nuttall, R. D., & Co.

Gears—Reduction—
Emsco Derrick & Equipment Co.
Nuttall, R. D., & Co.

Gears—Reverse—
Emsco Derrick & Equipment Co.

Generators—
Westinghouse Electric & Mfg. Co.

Generators—Acetylene—
Oxweld Acteylene Co.

Generators—Turbine—
Moon Manufacturing Co.
Pyle-National Co.
Westinghouse Electric & Mfg. Co.

Glassware—Chemical for Laboratory Use—
Illinois Glass Co.

Governors—
Equitable Meter & Mfg. Co.
Gardner Governor Co.

Governors—Boiler Feed—
Chaplin-Fulton Mfg. Co.
Fisher Governor Co.

Grating—Steel—
Blaw-Knox Co.

Grey Iron Castings (See Castings)

H

Hammers—Chipping and Caulking Pneumatic—
Chicago Pneumatic Tool Co.

Hammers—Riveting Pneumatic—
Chicago Pneumatic Tool Co.

Hangers—Iron and Steel—
Continental Supply Co.
Dodge Mfg. Corp.

Hangers—Tubing—
Hercules Tool Co.

Hatchets—Gauges and Thief—
Oil Conservation Engineering

Heat Exchangers—
Carbondale Machine Co.
Griscom-Russell Co.
Hope Engineering & Supply Co.
National Gas Products Co.
Newton Process Mfg. Co.
Ross Heater & Mfg. Co.
Southwestern Engineering Co., Inc.
Southwestern Engineering Corp.

Heat Interchangers—Fluid—
Braun, C. F., & Co.
Ross Heater & Mfg. Co., Inc.

Hoists—Pneumatic, Geared and Universal—
Chisholm-Moore Mfg. Co.
Yale & Towne Mfg. Co.

Hoists—Portable—
Chisholm-Moore Mfg. Co.
Ford Chain Block Co.
Sullivan Machinery Co.
Wright Mfg. Co.
Yale & Towne Mfg. Co.

Hooks for Rods and Tubing—
B. & A. Specialty Co.
Dunn Mfg. Co.

Hose—
Fenwick-Reddaway Mfg. Co.

Hose—Drillers—
Goodrich, B. F., Rubber Co.
United States Rubber Co.

Hose—Oil Suction and Discharge
Goodrich, B. F., Rubber Co.
United States Rubber Co.

Hose—Rubber—
Goodyear Tire & Rubber Co.
United States Rubber Co.

Hypochlorite of Lime—
Mathieson Alkali Works, Inc.

I

Injectors—
Penberthy Injector Co.

Inspectors—Pipe—
Hunt, Robert W., Co.

Insulation Materials—
Celite Products Co.
General Insulating & Mfg. Co.
Johns-Manville, Inc.

Insurance—Fire—
Oil Insurance Association.

Insurance—Tornado—
Oil Insurance Association.

Iron—Ingot—
American Rolling Mill Co.

J

Jacks—Hydraulic—
Bridgeport Machine Co.

Jacks—Lifting—
Templeton, Kenly & Co., Ltd.

Jacks—Pumping—
American Mfg. Co. of Texas.
American Wells Works.
Bessemer Gas Engine Co.
Braden Co.
Frick-Reid Supply Co.
Jones, S. M., Co.
Kansas City Hay Press Co.
Norris, W. C.
Spang & Co.

Jars—
Arbon, Paul, & Co.
Bridgeport Machine Co.
Spang & Co.

Jar Steel—
Andrews Steel Co.
Heppenstall Forge & Knife Co.

K

Kerosene—
Empire Refineries, Inc.
Gulf Refining Co.
Magnolia Petroleum Co.
Pure Oil Co.

L

Lacquers—
Arco Company, The.
Sherwin-Williams Co.

Lanterns—Electric—
Delta Electric Co.

Lead and Mixed Metal Products—
Eagle-Picher Lead Co.
National Lead Co.

Lead in Oil—
Eagle-Picher Lead Co.
National Lead Co.

Lead Wool and Containers—
Eagle-Picher Lead Co.

Lighting Equipment—
Pyle-National Co.
Westinghouse Electric & Mfg. Co.

Litharge—
Eagle-Picher Lead Co.
National Lead Co.

Loaders—Trucks—
Barber-Greene Co.

Long Distance Telephone—
American Telephone & Telegraph Co.

Lubricating Devices—
McCord Radiator & Mfg. Co.

Lubricators—
Ajax Iron Works.
Lunkenheimer Co.

Lubricators—Force Feed—
Hills-McCanna Co.
McCord Radiator & Mfg. Co.
Manzel Brothers Co.

M

Machine Tools—
Ryerson, Jos. T., & Sons, Inc.

Manholes—Tank—
Brooks Engineering Corp.

Manifolds—
Reid, Joseph, Gas Engine Co.

Meters—Gas—
Equitable Meter & Mfg. Co.
Foxboro Co., Inc.
Metric Metal Works.
Pittsburgh Meter Co.
Roots, P. H. & F. M., Co.
Westcott & Greis.

Meters—Electric—
Brown Instrument Co.

Meters—Gasoline—
Pittsburgh Meter Co.

Meters—Oil—
Pittsburgh Meter Co.

Molded Goods—Rubber—
Goodyear Tire & Rubber Co.

Motors—Electric—
Fairbanks-Morse & Co.
Westinghouse Electric & Mfg. Co.

Motors—Gasoline (See Engines—Gasoline)—

N

Naphtha—
Pure Oil Co.

Natural Gasoline (See Gasoline—Natural)—

Natural Gasoline Plant Equipment—
Campbell, J. A.
Cooper, C. & G., Co.
Griscom-Russell Co.
National Gas Products Co.
Roots, P. H. & F. M., Co.
Ross Heater & Mfg. Co., Inc.
Smith Separator Co.
Westcott & Greis.

Nitrogen—
Linde Air Products Co.

Nozzles—Spray—
Power Plant Equipment Co.

O

Oil and Gas Pipe Line Construction—
Hope Engineering & Supply Co.

Oil Burners (See Burners—Oil)—

Oil Field Equipment—
Baker Casing Shoe Co.
Bridgeport Machine Co.
Gaso Pump & Burner Mfg. Co.
International Derrick & Equipment Co.
Iron King Mfg. Co.
Kaw Steel Construction Co.
National Supply Co.
Oil Well Supply Co.
Parkersburg Machine Co.
Parkersburg Rig & Reel Co.
Reed Roller Bit Co.
Regan Forge & Engineering Co.
Reid, Joseph, Gas Engine Co.
Republic Supply Co.
Simplex Equipment Co.
Trumble Gas Trap Co.

Oil—Fuel—
Crown Central Petroleum Corp.
Empire Refineries, Inc.
Gulf Refining Co.
Magnolia Petroleum Co.
Pure Oil Co.
Sinclair Refining Co.
Texas Company, The.

Oil—Gas—
Crown Central Petroleum Corp.
Gulf Refining Co.
Pure Oil Co.
Sinclair Refining Co.
Texas Company, The.

Oil—Lubricating—
Barnsdall Refining Co.
Crown Central Petroleum Corp.
Empire Refineries, Inc.
Gulf Refining Co.
Humble Oil & Refining Co.
Magnolia Petroleum Co.
Pure Oil Co.
Sinclair Refining Co.
Skelly Oil Co.
Texas Company, The.

Oil—Tractor—
Barnsdall Refining Co.
Gulf Refining Co.
Pure Oil Co.
Skelly Oil Co.

Oiling Devices—
Lunkenheimer Co.

Oil Meters (See Meters)—

Oil Piping Equipment (See Fittings)—

Oil Reclaiming Process—
Barnickel, Wm. S., & Co.

Oil Well Cementing—
Halliburton Oil Well Cementing Co.

Oil Well Tools—
D. & B. Pump & Supply Co.
Hinderliter Tool Co.
Reed Roller Bit Co.
Titusville Forge Co.
U. S. Tool Co.

Over Shots—
Reed Roller Bit Co.
Regan Forge & Engineering Co.

Oxygen—
Linde Air Products Co.

P

Packer Release—
Acme Fishing Tool Co.

Packers—
Goodyear Tire & Rubber Co.
Guiberson Corp.
Larkin & Co.
Layne & Bowler Co.
Meier, E. C., Lubricating Co.
Oil Well Supply Co.
Regan Forge & Engineering Co.
Spang & Co.
United States Rubber Co.

Packing—
Crane Packing Co.
Durabla Mfg. Co.
Garlock Packing Co.
Goodrich, B. F., Rubber Co.
Imperial Belting Co.
Johns-Manville, Inc.

Packing—Metallic—
Crane Packing Co.

Paints—
Aluminum Co. of America.
American Asphalt Paint Co.
Arco Company, The.
Detroit Graphite Co.
Dixon, Joseph, Crucible Co.
Du Pont de Nemours, E. I. & Co., Inc.
Eagle-Picher Lead Co.
Eclipse Paint & Mfg. Co.
Hill, Hubbell & Co.
National Lead Co.
Sherwin-Williams Co.
St. Louis Surfacer & Paint Co.

Pipe—Cast Iron—
Greenspon's Jos., Sons Iron & Steel Co.
International Supply Co.
U. S. Cast Iron Pipe & Fdy. Co

Pipe—Lead Chemical and Antimonial—
Eagle-Picher Lead Co.
National Lead Co.

Pipe—Steel—
Central Tube Co.
Continental Supply Co.
Greenspon's Jos., Sons Iron & Steel Co.
Jarecki Mfg. Co.
Kellogg, M. W., Co.
Murray Tool & Supply Co.
National Supply Co.
National Tube Co.
Republic Iron & Steel Co.
Ryerson, Jos. T., & Sons, Inc.
South Chester Tube Co.
Spang Chaifant & Co., Inc.
Superior Tube Co.
Taubman Supply Corp.
Wheeling Steel Corp.

Pipe—Wrought Iron—
Byers, A. M., Co.
Frick-Reid Supply Co.
Greenspon's Jos., Sons Iron & Steel Co.
Oil Well Supply Co.
Reading Iron Co.
South Chester Tube Co.
Superior Tube Co.
Taubman Supply Corp.

Pipe and Nipple Threading Machines—
Bignall & Keeler Machine Works.
Cox & Sons Co., The
Landis Machine Co.
Ryerson, Jos. T., & Sons, Inc.
Standard Engineering Co.

Pipe Clamps (See Clamps—Pipe)—

Pipe Grips—
Larkin & Co.

Pipe Headers—
National Tube Co.
Newton Process Mfg. Co.

Pipe Line Coatings—
Hill, Hubbell & Co.

Pipe Line Construction Tools—
National Transit Pump & Machine Co.

Pipe Line Equipment—
Gaso Pump & Burner Mfg. Co.

Pipe Screwing Machines—
Buckeye Traction Ditcher Co.

Pipe Straightening Machines—
W-K-M Co., Inc.

Pipe Suspension Device—
Stearns-Roger Mfg. Co.

Pipe Threaders—Power—
Williams Tool Corp.

Pipe Tools—
Armstrong Brothers Tool Co.
Nye Tool & Machine Works.
Ridge Tool Co.
Walworth Co.

Piping—Fabricated—
Midwest Piping & Supply Co.

Piping—Hard Rubber—
United States Rubber Co.

Piping—Steel & Iron—
Crane Co.
Greenspon's, Jos., Sons Iron & Steel Co.
Power Piping Co.

Pistons—
Guiberson Corp.
Heppenstall Forge & Knife Co.

Pistons—Expansion—
Wilson Oil Tools Corp.

Pistons—Slush Pump—
Guiberson Corp.

Plugs—Bottom Water—
Guiberson Corp.

Pre-Heaters—
National Gas Products Co.
Newton Process Mfg. Co.
Ross Heater & Mfg. Co., Inc.

Preservatives—Asphalt—
American Asphalt Paint Co.

Pulleys—Wood, Iron and Steel—
Continental Supply Co.
Dodge Mfg. Co.

Pulling Machines—
Iron King Mfg. Co.
National Supply Co.
Safety Pulling Machine Co.

Pumpers—Long Stroke—
Farley Machine Co.

Pumping and Pulling Motors—Electric—
Westinghouse Electric & Mfg. Co.

Pumping Equipment—
American Well Works.
Axelson Machine Co.
Byron Jackson Pump Mfg. Co., Inc.
D & B Pump & Supply Co.
Farley Machine Co.
Goulds Pumps, Inc.
Jones, S. M., Co.
Myers, F. E., & Bros. Co.
Northrup Equipment Co.
Oil Well Supply Co.
Prescott Co.
Ratigan, J. P., Co.
Waukesha Motor Co.

Pumping Gear Units—
Nuttall, R. D., & Co.

Pumping Powers—
Bessemer Gas Engine Co.
Buda Co.
Frick-Reid Supply Co.
Jones, S. M., Co.
Kansas City Hay Press Co.
Marion Mch., Fdy. & Supply Co.
National Supply Co.
Oil Well Supply Co.
Pattin Bros. Co.
Reid, Joseph, Gas Engine Co.
Spence Machine Co.
Titusville Iron Works Co.

Pumps—Boiler Feed—
Ajax Iron Works.
Byron Jackson Pump Mfg. Co., Inc.
Fairbanks-Morse & Co.
Gardner Governor Co.
Goulds Pumps, Inc.
Oil Well Supply Co.
Smith Separator Co.

Pumps—Centrifugal—
American Well Works.
Byron Jackson Pump Mfg. Co., Inc.
Fairbanks-Morse & Co.
Goulds Pumps, Inc.
Smith Separator Co.
Worthington Pump & Machinery Corp.

Pumps—Direct Driven—
Bessemer Gas Engine Co.
Smith Separator Co.

Pumps—Electric—
Prescott Co.
Smith Separator Co.

Pumps—Fuel Oil Service—
Blackmer Pump Co.
Goulds Pumps, Inc.
Northern Fire Apparatus Co.
Smith Separator Co.

Pumps—Fuel Oil Transfer—
Blackmer Pump Co.
Byron Jackson Pump Mfg. Co., Inc.

Pumps—Gasoline and Oil for Filling Stations—
Gilbert & Barker Mfg. Co.

Pumps—Gear Driven—
Gaso Pump & Burner Mfg. Co.
Lucey Mfg. Corp.
Prescott Co.
Smith Separator Co.

Pumps—Hot Oil—
Blackmer Pump Co.
Byron Jackson Pump Mfg. Co., Inc.
Goulds Pumps, Inc.
Smith Separator Co.

Pumps—Pipe Line—
Byron Jackson Pump Mfg. Co., Inc.
Frick-Reid Supply Co.
Gardner Governor Co.
Gaso Pump & Burner Mfg. Co.
Goulds Pumps, Inc.
National Transit Pump & Machine Co.
Prescott Co.
Worthington Pump & Machinery Corp.

Pumps—Portable—
Gaso Pump & Burner Mfg. Co.

Pumps—Power—
Fairbanks-Morse & Co.
Gardner Governor Co.
Gaso Pump & Burner Mfg. Co.
Goulds Pumps, Inc.
Myers, F. E., Bro. & Co.
National Transit Pump & Machine Co.
Prescott Co.
Smith Separator Co.
Waukesha Motor Co.

Pumps—Refinery—
Blackmer Pump Co.
Byron Jackson Pump Mfg. Co., Inc.
Gardner Governor Co.
Gaso Pump & Burner Mfg. Co.
Goulds Pumps, Inc.
National Transit Pump & Machine Co.
Northern Fire Apparatus Co.
Smith Separator Co.

Pumps—Rotary—
Blackmer Pump Co.
Goulds Pumps, Inc.
Northern Fire Apparatus Co.
Roots, P. H. & F. M., Co.

Pumps—Sand—
Bridgeport Machine Co.
Larkin & Co.
Smith Separator Co.

Pumps—Slush—
Gardner Governor Co.

Pumps—Steam—
Fairbanks-Morse Co.
Frick-Reid Supply Co.
Gardner Governor Co.
Gaso Pump & Burner Mfg. Co.
Lucey Mfg. Corp.
National Transit Pump & Machine Co.
Oil Well Supply Co.
Prescott Co.
Smith Separator Co.

Pumps—Suction—
Gaso Pump & Burner Mfg. Co.

Pumps—Vacuum—
Bessemer Gas Engine Co.
Chicago Pneumatic Tool Co.
Clark Brothers Co.
Gaso Pump & Burner Mfg. Co.
Miller Improved Gas Engine Co.
Roots, P. H. & F. M., Co.
Ross Heater & Mfg. Co., Inc.
Smith Separator Co.

Pumps—Water—
American Well Works
Byron Jackson Pump Mfg. Co., Inc.
Gaso Pump & Burner Mfg. Co.
Goulds Pumps, Inc.
Northern Fire Apparatus Co.
Prescott Co.
Smith Separator Co.

Pyrometers—
Brown Instrument Co.
Republic Flow Meters Co.

R

Ratchet Pipe Cutters—
Toledo Pipe Threading Machine Co.

Ratchet Pipe Threaders—
Nye Tool & Machine Works.
Toledo Pipe Threading Machine Co.

Ratchet Reamers—
Nye Tool & Machine Works.

Ratchet Stocks and Dies—
Nye Tool & Machine Works.
Toledo Pipe Threading Machine Co.

Receiving Boxes—
Reid, Joseph, Gas Engine Co.

Recorders—Differential Pressure—
Equitable Meter & Mfg. Co.
Metric Metal Works.

Refinery Equipment—
American Radiator Co.
Blaw-Knox Co.
Braun, C. F., & Co.
Carbondale Machine Co.
Chicago Bridge & Iron Works
Graver Corp.
Griscom-Russell Co.
Kellogg, M. W., Co.
McKee, Arthur G., & Co.
Newton Process Mfg. Co.
Petroleum Appliance Co.
Petroleum Iron Works Co.
Power Piping Co.
Power Specialty Co.
Reid, Joseph, Gas Engine Co.
Ross Heater & Mfg. Co., Inc.
Ross-Meehan Foundries
Smith, A. O., Corp.
Smith Separator Co.
Southwestern Engineering Co., Inc.
Southwestern Engineering Corp.
United Iron Works, Inc.
Universal Oil Products Co.
Vogt, Henry, Machine Co.
Walsh & Weidner Boiler Co.
Westcott & Greis.
Widdell Engineering Co.

Refractories—Furnace, Stills and Baffles—
National Gas Products Co.

Refrigerating Machinery—
Carbondale Machine Co.
United Iron Works, Inc.
Vogt, Henry, Machine Co.

Regulators—
Fisher Governor Co.
Gilfillan Machine Works
Smith Separator Co.

Regulators—Gas—
Chaplin-Fulton Mfg. Co.
Davis, G. M., Regulator Co.
Equitable Meter & Mfg. Co.
Fisher Governor Co.
Metric Metal Works
National Gas Products Co.
Smith Separator Co.

Rental Service—
Bridgeport Machine Co.

Reversible Clutches—
Bessemer Gas Engine Co.

Rig Irons—
International Supply Co.
Lucey Mfg. Corp.
National Supply Co.
Oil Well Supply Co.
Parkersburg Rig & Reel Co.

Rigs—Drilling, All Steel—
International Derrick & Equipment Co.
Moore, Lee C., & Co., Inc.

Rigs—Portable Drilling—
National Supply Co.
National Tunbuckle Derrick Co.
Star Drilling Machine Co.

Rod Guides—
Meier, E. C., Lubricating Co.

Rods—Gauge—
Missouri Woodworking Co.

Rods—Polish—
Jones, S. M., Co.

Rods—Pull—
Axelson Machine Co.
Columbus Sucker Rod Co.
Jones, S. M., Co.
Sheffield Steel Corp.

Rods—Sucker—
Axelson Machine Co.
Columbus Sucker Rod Co.
D & B Pump & Supply Co.
Frick-Reid Supply Co.
Jones, S. M., Co.
National Supply Co.
Oil Well Supply Co.
Republic Supply Co.
Sheffield Steel Corp.

Rods—Valve—
Jones, S. M., Co.

Roofing—Asbestos—
Johns-Manville, Inc.

Roofing—Galvanized Iron—
American Rolling Mill Co.

Rope Socket Metal—
Eagle-Picher Lead Co.

Rope—Manila—
Ajax Rope Co., Inc.
Bovaird Supply Co.
Republic Supply Co.

Rope—Wire—
Ajax Rope Co., Inc.
Bovaird Supply Co.
Bridgeport Machine Co.
Broderick & Bascom Rope Co.
International Supply Co.
Jarecki Mfg. Co.
Wickwire-Spencer Steel Corp.
Leschen, A., & Sons, Rope Co.
Williamsport Wire Rope Co.

Rotary Bit Steel—
Andrews Steel Co.
Heppenstall Forge & Knife Co.

Rotary Drilling Equipment—
Emsco Derrick & Equipment Co.
Frick-Reid Supply Co.
International Derrick & Equipment Co.
Link-Belt Co.
Lucey Mfg. Co.
National Supply Co.
Oil Well Supply Co.
Republic Supply Co.
Titusville Iron Works Co.

Rotary Lines (See Rope—Wire)—

Rotary Post—
Reed Roller Bit Co.

Rotary Tool Joints—
Bartlesville Supply Co.
Hughes Tool Co.

Rust Preventatives—
Dearborn Chemical Co.
Eagle-Picher Lead Co.

S

Sand Lines—Manila—
Ajax Rope Co., Inc.
Plymouth Cordage Co.

Sand Lines—Wire—
Ajax Rope Co., Inc.
Broderick & Bascom Rope Co.
Hazard Mfg. Co.
Wickwire-Spencer Steel Corp.

Screens—Oil Well—
Layne & Bowler Co.

Screens—Water Well—
Layne & Bowler Co.

Screws Temper—
Burns Tool Co.

Securities—Oil—
Pforzheimer, Carl H., & Co.

Separators—Centrifugal—
Miller, Max B., & Co.

Separators—Gas and Oil—
Smith Separator Co.

Separators—Steam—
Volz Engineering Equipment Co.

Sheet Lead—Chemical and Antimonial—
Eagle-Picher Lead Co.

Sheets—Corrugated, Black and Galvanized—
American Rolling Mill Co.
American Sheet & Tin Plate Co.
Ryerson, Jos. T., & Son, Inc.
United Alloy Steel Corp.

Sheets—Iron—
American Rolling Mill Co.

Sheets—Steel—
American Rolling Mill Co.
American Sheet & Tin Plate Co.
Sheffield Steel Corp.
United Alloy Steel Corp.

Shingles—Asbestos—
Johns-Manville, Inc.

Siding—Galvanized Iron—
American Rolling Mill Co.

Sleeves—
Dayton Pipe Coupling Co.
Dresser, S. R., Mfg. Co.

Sleeves—Split—
Dayton Pipe Coupling Co.
Dresser, S. R., Mfg. Co.

Smoke Stacks—
Donovan Boiler Works

Snuffers—Fire—
Simplex Equipment Co.

Sockets—
Acme Fishing Tool Co.
Bridgeport Machine Co.
Spang & Co.

Sockets—Sucker Rod—
Guiberson Corp.

Sockets—Swivel—
Arbon, Paul, & Co.

Sockets—Wire Rope—
Chicago Steel Foundry Co.

Soda Ash—
Mathieson Alkali Works, Inc.

Soda—Caustic—
Mathieson Alkali Works, Inc.

Solders—Bar and Wire—
Eagle-Picher Lead Co.
Hoyt Metal Co.

Spark Plugs—
Mosler Metal Products Corp.

Spears—
Acme Fishing Tool Co.
Brown Tool Co., Inc.

Sprockets—Power Transmission—
Ajax Iron Works
Chain Belt Co.

Stands—Vice—
Nye Tool & Machine Works

Steel—All Kinds—
Ryerson, Jos. T., & Son, Inc.

Steel—Alloy—
Central Steel Co.
Timken Roller Bearing Co.
United Alloy Steel Corp.

Steel—Bit—
Central Steel Co.
United Alloy Steel Corp.

Steel—Hot Rolled Strip—
Central Steel Co.

Steel—Special—
Andrews Steel Co.
Central Steel Co.
United Alloy Steel Corp.

Steel Fabricators—Structural—
Austin Co.
Braden Co.
Graver Corp.
International Derrick & Equipment Co.

Steel Pitmans—
International Derrick & Equipment Co.
Moore, Lee C., & Co., Inc.

Steel Plate Construction—
Chicago Bridge & Iron Works
Graver Corp.
Kaw Steel Construction Co.
Pennsylvania Engineering Works
Petroleum Iron Works Co.
Vogt, Henry, Machine Co.

Steel Wheels and Tug Rims—
International Derrick & Equipment Co.

Stills—
Blaw-Knox Co.
Graver Corp.
Kaw Steel Construction Co.
Kellogg, M. W., Co.
McKee, Arthur G., & Co.
Newton Process Mfg. Co.
Petroleum Iron Works Co.
Smith, A. O., Corp.
Vogt, Henry, Machine Co.
Widdell Engineering Co.

Stocks and Dies—
Borden Co.
Nye Tool & Machine Works
Toledo Pipe Threading Machine Co.

Stuffing Boxes—
Axelson Machine Co.
Kansas City Hay Press Co.

Sulphuric Acid—
Eagle-Picher Lead Co.

Superheaters—Steam—
Power Plant Equipment Co.

Swabs—
Arbon, Paul, & Co.
Burt Corporation
Guiberson Corp.
Simplex Equipment Co.

Swedge Nipples—
Dresser, S. R., Mfg. Co.
Harrisburg Pipe & Pipe Bending Co.

Swing Line Equipment—
Brooks Engineering Corp.

Swivels—
Layne & Bowler Co.
Lucey Mfg. Corp.
Titusville Iron Works Co.

T

Tachometers—
Brown Instrument Co.

Tank Equipment—
Brooks Engineering Corp.
Oil Conservation Engineering Co.

Tanks—Bolted—
Butler Mfg. Co.
Columbian Steel Tank Co.
Maloney Tank Mfg. Co.
Parkersburg Rig & Reel Co.

Tanks—Bulk Station—
Butler Mfg. Co.
Graver Corp.

Tanks—Cylindrical—
Graver Corp.
Petroleum Iron Works Co.

Tanks—Elevated Steel—
Chicago Bridge & Iron Works
Graver Corp.

Tanks—Field Storage—
American Car & Foundry Co.
Donovan Boiler Works
Graver Corp.
Kaw Steel Construction Co.
Kewanee Boiler Co.
Maloney Tank Mfg. Co.
Petroleum Iron Works Co.
Pittsburgh-Des Moines Steel Co.
Riter-Conley Co.
United Iron Works, Inc.

Tanks—Horizontal Storage—
Graver Corp.
Kaw Steel Construction Co.
Maloney Tank Mfg. Co.

Tanks—Run Down—
Chicago Bridge & Iron Works
Donovan Boiler Works
Graver Corp.
Kaw Steel Construction Co.
Newton Process Mfg. Co.

Tanks—Steel Storage—
Chicago Bridge & Iron Works

Tanks—Truck—
Butler Mfg. Co.
Columbian Steel Tank Co.

Tanks—Underground—
Butler Mfg. Co.
Gilbert & Barker Mfg. Co.
Graver Corp.
Kewanee Boiler Co.
Pittsburgh-Des Moines Steel Co.

Tanks—Welded—
Chicago Bridge & Iron Works
Graver Corp.
Pennsylvania Engineering Works

Taper Taps—
Hughes Tool Co.

Tapes—Measuring for Oil Gauging—
Lufkin Rule Co.
States Engineering Co.

Thermometers—Indicating and Recording—
American Shaeffer & Budenberg Corp.
Bristol Co.
Brown Instrument Co.

Thermometers—Resistance—
Brown Instrument Co.

Threading Machines—
Bignall & Keeler Machine Wks.
Cox & Sons Co., The
Landis Machine Co.

Thread Protectors—
Spang & Co.

Tires—Automobile—
Continental Supply Co.

Tires—Pneumatic & Solid—
Kelly-Springfield Tire Co.

Tires—Truck—
Kelly-Springfield Tire Co.

Tongs—
Bridgeport Machine Co.
Wilson Oil Tools Corp.

Tongs—Back Up—
Williams, J. H., & Co.

Tongs—Break Out—
Reed Roller Bit Co.
Williams, J. H., & Co.

Tongs—Casing—
Dunn Mfg. Co.
Guiberson Corp.

Tongs—Chain Pipe—
Armstrong Bros. Tool Co.
Williams, J. H., & Co.

Tongs—Pipe—
National Transit Pump & Machine Co.

Tongs—Rotary—
Dunn Mfg. Co.

Tongs—Tool Joint—
Guiberson Corp.
Hughes Tool Co.
Reed Roller Bit Co.

Tongs—Tubing—
Dunn Mfg. Co.

Tool Chests—Pipe—
Nye Tool & Machine Works

Tool Joints—
Bridgeport Machine Co.
Federal Supply Co.
Hughes Tool Co.
Lucey Mfg. Corp.
Oil Well Supply Co.
Regan Forge & Engineering Co.

Torches—
Oxweld Acetylene Co.

Towers—
Graver Corp.

Tractors—
Cleveland Tractor Co.
International Harvester Co. of America.

Trailers—
Spencer Trailer Co.

Transmission Belt—Rubber—
Goodrich, B. F., Rubber Co.
United States Rubber Co.

Transmission Lining—
Stanley Belting Corp.

Traveling Block—
Lucey Mfg. Corp.
Regan Forge & Engineering Co.
Wright Mfg. Co.

Trenchers—Vertical Boom—
Barber-Greene Co.

Trucks—Motor—
Ford Motor Co.
General Motors Truck Co.
Graham Brothers
International Harvester Co. of America

Tubes—Boiler, Charcoal Iron—
Byers, A. M., Co.
Reading Iron Co.

Tubes—Boiler Steel—
Continental Supply Co.
National Tube Co.
Ryerson, Jos. T., & Sons, Inc.

Tubing—
Babcock & Wilcox Tube Co.
Byers, A. M., Co.
Central Tube Co.
Continental Supply Co.
National Tube Co.
Pittsburgh Steel Products Co.
Reading Iron Co.
Republic Iron & Steel Co.
South Chester Tube Co.
Spang, Chalfant & Co., Inc.
Superior Tube Co.
Wheeling Steel Corp.

Tubing Catchers—
Dunn Mfg. Co.
Guiberson Corp.

Tubing Protectors (See Rod Guides)—

Tubular Goods—
Babcock & Wilcox Tube Co.
Central Tube Co.
Continental Supply Co.
Oil Well Supply Co.
Pittsburgh Steel Products Co.
Republic Iron & Steel Co.
Spang, Chalfant & Co., Inc.
Wheeling Steel Corp.

Tubular Goods—Wrought Iron—
Byers, A. M., Co.
Reading Iron Co.

Turbines for Lighting Equipment
Lucey Mfg. Corp.
Westinghouse Electric & Mfg. Co.

U

Underreamer Body Steel—
Andrews Steel Co.
Heppenstall Forge & Knife Co.

Underreamers—
Bridgeport Machine Co.
Brown Tool Co., Inc.
Guiberson Corp.
Wilson Oil Tools Corp.

Unions—
Central Forging Co.
Dart, E. M., Mfg. Co.
Jefferson Union Co.

V

Valuations—
American Appraisal Co.

Valves—Blow-Off—
Homestead Valve Mfg. Co.
Merco Nordstrom Valve Co.

Valves—Brass & Bronze—
Homestead Valve Mfg. Co.
Lunkenheimer Co.
Reading Steel Casting Co.
Walworth Co.

Valves—Cast Steel—
Chapman Valve Mfg. Co.
Homestead Valve Mfg. Co.
Walworth Co.

Valves—Check—
Gaso Pump & Burner Mfg. Co.
Lunkenheimer Co.
Walworth Co.

Valves—Drop Forged Steel—
Edwards Valve & Mfg. Co.
Vogt, Henry, Machine Co.

Valves—Gate—High and Low Pressure—
Chapman Valve Mfg. Co.
Crane Co.
Darling Valve & Mfg. Co.
Kennedy Valve Mfg. Co.
Kerotest Mfg. Co.
Ludlow Valve Mfg. Co.
Lunkenheimer Co.
Murray Tool & Supply Co.
Powell, Wm., Co.
Walworth Co.

Valves—Iron—
Chapman Valve Mfg. Co.
Lunkenheimer Co.
Merco Nordstrom Valve Co.
Reading Steel Casting Co.
Walworth Co.

Valves—Metal Pump—
Durabla Mfg. Co.

Valves—Pump—
United States Rubber Co.

Valves—Relief—Supersensitive—
Davis, G. M., Regulator Co.

Valves—Steel—
Chapman Valve Mfg. Co.
Edward Valve Mfg. Co.
Kerotest Mfg. Co.
Lunkenheimer Co.
Metric Metal Works
Powell, Wm., Co.
Reading Steel Casting Co.
Walworth Co.

Valves—Tank Vent—
Brooks Engineering Corp.
Oil Conservation Engineering Co.

Valves—Working Barrel—
Atlas Ball Co.
Axelson Machine Co.
D & B Pump & Supply Co.
Hough, Charles N., Mfg. Co.
Northrup Equipment Co.
Oil Well Supply Co.

Varnishes—
Arco Company, The
Detroit Graphite Co.
Sherwin-Williams Co.

Ventilators—
Burt Mfg. Co.

Vises—Bench—
Nye Tool & Machine Works

Vises—Pipe—
Nye Tool & Machine Works

Vises—Post—
Nye Tool & Machine Works

W

Wagons—Truss Wheel—
Athey Truss Wheel Co.

Walking Beams—Steel—
Emsco Derrick & Equipment Co.
Moore, Lee C., & Co., Inc.

Water Cooling Systems—
Power Plant Equipment Co.

Water Softeners and Filters—
Butler Mfg. Co.
Graver Corp.

Wax—
Barnsdall Refining Co.
Gulf Refining Co.
Pure Oil Co.

Weight Indicators—
Hughes Tool Co.

Welding Accessories—Electric—
Wilson Welder & Metals Co.

Welding and Cutting Apparatus—
Oxweld Acetylene Co.

Welding Machines—Electric—
Wilson Welder & Metals Co.

Welding Supplies—
Oxweld Acetylene Co.

Welding Wire—
Frick-Reid Supply Co.
Oxweld Acetylene Co.
Wilson Welder & Metals Co.

Well Shooting—
Eastern Torpedo Co.
Kinley, M. M.
Zero Hour Torpedo Co.

Wheels—Pipe Cutter—
Nye Tool & Machine Works

Winches—
Braden Co.
Brooks Engineering Co.
Oil Conservation Engineering Co.

Wire Lines (See Cables—Steel)—

Wood Patterns and Models—
Gaso Pump & Burner Mfg. Co.

Working Barrels—
Axelson Machine Co.
D & B Pump & Supply Co.
D. & N. Specialty Co.
Franklin Valveless Engine Co.
Frick-Reid Supply Co.
Hough, Charles N., Mfg. Co.
McGregor Working Barrel Co.
Norris, W. C.
Northrup Equipment Co.
Oil Well Supply Co.

Wrenches—Closet Spuds—
Nye Tool & Machine Works

Wrenches—Drop Forged—
Williams, J. H., & Co.

Wrenches—Pipe—
Trimont Mfg. Co.
Walworth Co.

Wrenches—Ratchet—
Dresser, S. R., Mfg. Co.
Nye Tool & Machine Works

Z

Zinc Oxide—
Eagle-Picher Lead Co.

Oklahoma-Kansas and Eastern Pipeline Report

OKLAHOMA-KANSAS PIPELINE STATEMENT FOR JULY

Runs

	Month	Daily Av.
*Prairie Pipe Line Co.	4,061,000	131,000
Gulf Pipe Line Co.	1,294,335	41,753
Texas Pipe Line Co.	620,352	20,011
Magnolia Pet. Co.	1,197,214	38,620
Empire Pipe Line Co.	701,728	22,636
Cosden Pipe Line Co.	798,341	25,753
Sinclair Pipe Line Co.	1,817,530	58,630
*Other lines	7,731,000	251,000
Total July	18,271,500	589,403
Total June	17,014,842	567,161
Difference	1,256,658	22,242

Shipments

	Month	Daily Av.
†Prairie Pipe Line Co.	4,234,294	136,590
Gulf Pipe Line Co.	1,112,450	35,886
Texas Pipe Line Co.	748,852	24,157
Magnolia Pet. Co.	1,548,204	49,942
Empire Pipe Line Co.	817,578	26,373
Cosden Pipe Line Co.	841,880	27,157
‡Sinclair Pipe Line Co.	2,515,377	81,141
*Other lines	7,967,000	257,000
Total July	19,785,635	638,246
Total June	19,357,803	645,260
Difference	427,832	7,014

Stocks

*Prairie Oil & Gas Co.	27,450,000
*Prairie Pipe Line Co.	2,000,000
Gulf Pipe Line and Gypsy Oil	6,582,110
The Texas Company	2,978,951
Magnolia Pet. Co.	4,136,562
Empire Pipe Line Co.	2,620,291
Cosden Pipe Line Co.	1,873,424
*Sinclair Crude Oil Purchasing Co.	18,000,000
Carter Oil Co.	12,708,112
*Other lines	9,300,000
Total July	87,649,450
Total June	89,443,202
Difference	1,793,752

*Estimated.
†Prairie shipments include Texas crude oil. Sinclair shipments include Texas and Wyoming crude oil.
Note: Stocks do not include 4,800,000 bbls. of crude oil held in storage on private tank farms and leases.

EASTERN PIPE LINES

Runs From Wells

In the following table will be found the regular receipts from wells by various pipelines in New York, Pennsylvania, West Virginia, Ohio, Kentucky and Indiana for June and July.

	June, '26	July, '26
Nat. Transit	169,062.33	163,355.48
S. W. Pa. Pipe	96,302.81	101,686.03
Eureka Pipe	388,529.04	392,989.67
Buckeye P. L. (Macksburg)	317,931.59	306,269.80
Buckeye P. L. (Cleveland)	12,694.00	11,170.47
Buckeye P. L. (Lima, etc.)	139,350.89	137,149.47
Indiana P. L.	11,401.12	10,828.41
Cumberland P. L.	271,131.47	282,211.58
N. Y. Transit	20,964.71	21,334.18
Tidewater P. L.	165,122.06	168,664.93
Pure Oil	171,908.20	176,489.50
Emery P. L.	53,721.55	53,064.83
Indian Ref.	98,207.86	104,990.12
Paragon Dev.	222.32	22,718.44
Pittsburgh P. L.	7,380.66	6,486.24
Total	1,923,930.61	1,959,400.15
Daily average	64,131.02	63,206.46

Note—Indian Refining Co. also reported other receipts of 254,924.52 bbls. Paragon Refining Co. had other receipts of 154,728.15 bbls. Paragon Development had other receipts of 2,162.99 bbls. Pure Oil had other receipts of 72,402.22 bbls.

Petroleum Deliveries

The following tables exhibit the shipments or regular deliveries of various pipelines in New York, Pennsylvania, West Virginia, Ohio, Kentucky and Indiana for June and July:

	June, '26	July, '26
Nat. Transit	309,943.34	370,891.32
S. W. Pa. P. L.	410,424.53	409,458.09
Eureka P. L.	157,187.82	194,502.54
Buckeye P. L. (Macksburg)	143,825.27	154,972.89
Buckeye P. L. (Cleveland)	969.86	1,408.19
Buckeye P. L. (Lima, etc.)	889,104.44	895,654.71
Indiana P. L.	963,293.95	995,699.54
Cumberland P. L.	168,812.76	168,426.65
N. Y. Transit	609,865.71	648,783.66
Northern P. L.	156,433.96	185,783.37
Tidewater P. L.	112,918.87	107,643.02
Pure Oil	251,768.14	238,473.30
Emery P. L.	61,241.24	64,161.96
Paragon Ref.	138,895.17	159,136.74
Indian Ref.	411,634.57	372,128.62
Paragon Dev.	24,375.86	24,942.64
Pittsburgh P. L.	7,111.28	7,169.75
Total	4,807,716.76	4,989,308.90
Daily average	160,257.23	160,945.45

Gross Stocks

The gross stocks held by various pipelines in the oil producing sections of New York Pennsylvania, West Virginia, Ohio, Indiana and Kentucky, at the close of June and July, were as follows:

	June, '26	July, '26
Nat. Transit	1,092,580.36	1,053,770.84
S. W. Pa. P. L.	691,520.32	683,787.99
Eureka P. L.	1,505,989.62	1,483,121.26
Buckeye P. L. (Macksburg)	417,389.77	415,112.82
Buckeye P. L. (Cleveland)	96,462.04	85,333.91
Buckeye P. L. (Lima, etc.)	2,236,314.81	2,428,415.17
Indiana P. L.	656,955.26	676,702.06
Cumberland P. L.	636,899.55	633,819.77
Southern P. L.	364,453.41	476,270.69
N. Y. Transit	902,682.42	822,714.93
Northern P. L.	463,514.79	433,011.93
Pure Oil	439,660.41	450,205.94
Emery P. L.	38,147.78	37,324.53
Paragon Ref.	41,158.98	36,255.80
Indian Ref.	123,370.73	110,400.30
Paragon Dev.	4,340.27	4,313.95
Pittsburgh P. L.	4,483.60	4,124.64
Total	9,585,904.12	9,734,686.53
Increase	54,146.72	148,782.41

Grades of Oil

The following table shows the amount of the different grades of oil held by the eastern pipelines at the close of June and July showing the gross stocks of the above fields:

	June, '26	July, '26
Pennsylvania	3,941,471.18	4,047,418.29
Lima	878,020.72	859,783.19
Kentucky	1,151,573.86	1,249,214.91
Mid-Continent	3,592,023.19	3,502,567.49
Illinois	42,815.17	75,702.65
Total	9,585,904.12	9,734,686.53

Daily Average Runs

The following table shows the daily average runs of the Pennsylvania, Lima and Kentucky oil fields for the past four years:

	1923	1924	1925	1926
January	75,790	62,638	56,831	55,630
February	71,092	68,023	60,606	60,394
March	76,592	68,721	60,575	61,644
April	75,614	71,058	63,062	63,019
May	77,365	63,942	59,217	60,580
June	77,593	63,230	61,270	64,131
July	71,879	64,208	62,639	63,206
August	76,910	59,942	69,686	.....
September	72,358	62,930	62,510	.....
October	76,256	64,976	60,995	.....
November	70,762	56,282	59,350	.....
December	69,271	55,814	57,974	.....

Daily Average Shipments

The following table gives daily average shipments from the Pennsylvania, Lima and other fields for the past four years:

	1923	1924	1925	1926
January	171,067	145,618	157,889	156,056
February	164,219	148,732	160,863	156,488
March	185,487	147,098	154,591	150,239
April	170,751	147,611	161,429	162,371
May	177,102	134,997	146,995	160,988
June	173,598	143,010	149,467	160,257
July	168,330	124,187	161,338	160,945
August	142,776	123,120	161,730	.....
September	137,266	127,325	156,719	.....
October	134,597	123,170	145,388	.....
November	131,426	124,400	143,582	.....
December	139,909	161,392	160,162	.....

Gross Stocks

In the following table will be found the gross stocks of the various lines of the Pennsylvania, Lima and Kentucky oil fields, including oil received from other lines, at the close of each month for the past three years:

	1924	1925	1926
January	12,907,202	11,353,276	9,859,176
February	11,844,068	11,192,924	9,579,354
March	10,906,752	11,158,237	9,438,291
April	10,922,742	11,062,082	9,805,851
May	11,335,309	11,207,562	9,531,787
June	11,544,204	11,093,796	9,585,904
July	12,062,361	11,067,453	9,734,687
August	172,221,676	10,974,481	.....
September	12,206,836	10,781,753	.....
October	12,664,961	11,086,850	.....
November	12,268,530	11,068,158	.....
December	11,583,680	10,458,445	.....

Franklin Pipe Line Co.

The following table exhibits the condition of the Franklin Pipe Line at the close of business for the months named and not counted in the stocks and averages reported above.

	Receipts	Shipmts.	Stocks
1925—			
July	2,639.34	3,174.10	11,550.29
August	3,216.97	1,577.99	13,189.27
September	2,929.99	5,352.05	10,767.21
October	2,869.75	1,499.34	12,137.62
November	2,759.66	2,571.32	12,283.40
December	2,661.87	3,441.67	11,503.60
1926—			
January	2,999.16	1,478.35	13,015.41
February	2,580.23	2,776.19	12,819.45
March	2,754.62	1,732.77	13,841.30
April	3,137.40	4,519.68	12,459.02
May	2,933.29	2,096.35	13,295.96
June	3,217.62	1,655.15	14,858.43
July	3,025.86	4,075.11	13,809.18

The Illinois Field

The following table gives the report of the Illinois Pipe Line Co. in Illinois:

Gross stocks, Aug. 1	2,529,844.32
Runs from wells	684,910.04
Other receipts	230,983.04
Regular deliveries	436,288.50
Other deliveries	672,106.54

The amount of Illinois oil run by the Tide Water Pipe Co. in July was 28,580.62 bbls. and deliveries were 53,804.32 bbls. Adding these figures to those of the Illinois Pipe Line Co. makes the runs and deliveries as follows:

1925—		
July	724,481.26	564,713.19
August	673,652.38	650,649.97
September	706,434.87	510,697.61
October	706,532.00	633,682.32
November	664,556.30	488,449.19
December	665,086.99	578,938.47
1926—		
January	665,243.62	516,083.76
February	632,611.99	506,310.51
March	753,300.74	524,625.95
April	610,957.04	487,604.00
May	682,416.67	498,456.90
June	693,102.34	558,054.94
July	713,490.66	490,092.52

The Tide Water Pipe Co., Ltd., also delivered in July 173,325.78 bbls. of Oklahoma oil.

AVERAGE DAILY RECEIPTS OF CALIFORNIA OIL AT ATLANTIC AND GULF PORTS

Average bbls. per day—	ATLANTIC PORTS: Baltimore	Boston	New York	Philadelphia	Others	Total	GULF COAST PORTS: New Orleans Galveston	Port Arthur Baton Rouge	Sabine Pass	Tampa	Total	Total All Ports
April	19,033	5,133	28,333	13,400	22,867	88,767	.....	.....	4,700	.....	4,700	93,467
May	27,065	7,903	15,387	13,452	17,742	81,549	.....	.....	4,032	.....	4,032	85,571
June	24,533	11,000	22,800	34,467	15,167	107,967	.....	.....	.....	.....	.....	107,967
July	15,677	2,903	24,678	12,065	12,516	67,839	.....	.....	.....	645	645	68,484

AVERAGE DAILY IMPORTS OF PETROLEUM AT PRINCIPAL UNITED STATES PORTS

Average bbls. per day—	ATLANTIC PORTS: Baltimore	Boston	New York	Philadelphia	Others	Total	GULF COAST PORTS: New Orleans Galveston	Port Arthur Baton Rouge	Sabine Pass	Tampa	Total	Total All Ports
April	15,200	14,000	76,833	10,633	39,333	156,000	19,200	24,900	2,000	4,433	50,533	206,533
May	12,387	12,258	75,516	11,645	21,548	133,355	17,710	45,226	1,936	5,677	65,549	198,904
June	15,800	10,800	87,300	6,500	21,267	141,667	25,300	42,267	6,567	3,900	78,033	219,700
July	21,517	7,774	89,548	4,774	26,194	149,806	*13,226	†39,774	‡2,032	4,452	59,484	209,290

*Received at Galveston district. †Received at New Orleans and Baton Rouge. ‡Received at Port Arthur and Sabine Pass.

GROSS PRODUCTION OF THE UNITED STATES FOR 12 MONTHS

(IN BARRELS)

		California	Oklahoma	Texas	Kansas	Arkansas	Louisiana	Rocky Mountains	Eastern Fields	Total
August:	Month	21,055,580	14,441,040	11,936,079	3,558,087	7,450,580	1,858,543	3,250,448	3,177,000	66,677,357
	Daily average	677,599	465,480	385,022	114,777	240,341	56,727	104,853	102,484	2,150,883
September:	Month	20,062,763	14,825,040	11,264,890	3,393,270	6,457,950	1,776,570	3,235,625	3,212,000	64,228,108
	Daily average	668,759	494,168	375,496	113,109	215,265	56,219	107,854	107,067	2,140,937
October:	Month	20,015,076	14,921,199	11,196,511	3,477,146	6,409,281	1,871,830	3,394,990	3,248,000	64,534,033
	Daily average	645,648	481,329	361,178	112,166	206,751	60,382	109,500	104,774	2,081,743
November:	Month	19,095,907	14,590,980	10,650,087	3,221,760	5,927,955	1,758,882	3,088,121	2,992,000	61,325,693
	Daily average	636,530	486,366	355,003	107,397	197,599	58,629	102,937	99,753	2,044,190
December:	Month	19,249,711	14,128,848	10,930,455	3,308,816	6,047,883	1,763,966	3,187,164	3,086,900	61,698,743
	Daily average	620,959	455,608	352,595	106,736	195,093	56,902	102,812	99,552	1,990,282
January:	Month	19,069,563	13,674,813	11,049,715	3,250,536	5,489,604	1,726,390	3,136,280	3,014,000	60,410,901
	Daily average	615,147	441,123	356,442	104,856	177,084	55,690	104,396	97,226	1,948,741
February:	Month	17,163,963	12,392,016	9,943,232	2,877,812	4,756,836	1,584,184	2,778,605	2,931,000	54,427,648
	Daily average	612,999	442,572	355,115	102,779	169,887	56,578	99,236	104,678	1,978,844
March:	Month	18,825,786	14,312,886	11,014,238	3,334,887	5,115,837	1,889,663	3,161,250	3,349,000	61,003,547
	Daily average	608,283	461,706	355,298	107,577	165,027	60,957	101,976	108,032	1,957,856
April:	Month	18,091,771	14,468,190	10,799,760	3,330,120	5,127,510	1,959,570	3,231,404	3,183,000	60,191,325
	Daily average	603,059	482,273	359,992	111,004	170,917	65,319	104,239	106,100	2,006,377
May:	Month	18,667,144	14,507,008	11,940,797	3,516,640	5,482,939	2,231,938	3,459,489	3,317,000	63,122,955
	Daily average	602,166	467,968	385,187	113,440	176,879	71,998	111,596	107,000	2,036,224
June:	Month	18,269,417	14,073,510	11,783,550	3,366,450	5,064,760	2,205,480	3,437,905	3,365,000	61,566,073
	Daily average	608,981	469,117	392,785	112,215	168,822	73,516	114,597	112,167	2,052,202
July:	Month	18,743,199	14,657,482	13,983,759	3,613,267	5,019,892	2,173,813	3,336,664	3,348,000	64,876,076
	Daily average	604,619	472,822	451,089	116,557	161,932	70,123	107,634	108,000	2,092,777
	Total 12 months	228,259,870	170,988,012	136,493,073	40,248,791	68,351,037	22,800,829	38,697,945	38,222,000	744,062,457
	Daily average	625,369	468,460	373,954	110,271	187,263	62,468	106,022	104,718	2,038,527

XUM

fittings

The same quality of castings, the same accurate machining, the same careful workmanship that we put into Gaso Pumps we also put into Gaso FITTINGS. As a result, they have a special appeal for pipe line officials who build with the future in mind.

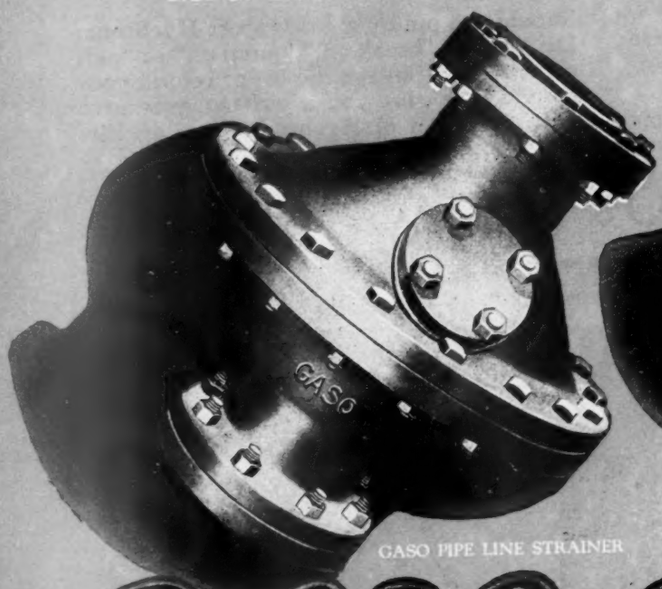
In addition to a comprehensive line of standard fittings—including heater heads, Beck with swing check valves, liner expanders, river clamps, pipe line strainers, extra heavy flanges and ground joint flange unions—our foundry and pattern shop enable us to figure on special requirements.

Our engineering department is, as always, at your command.

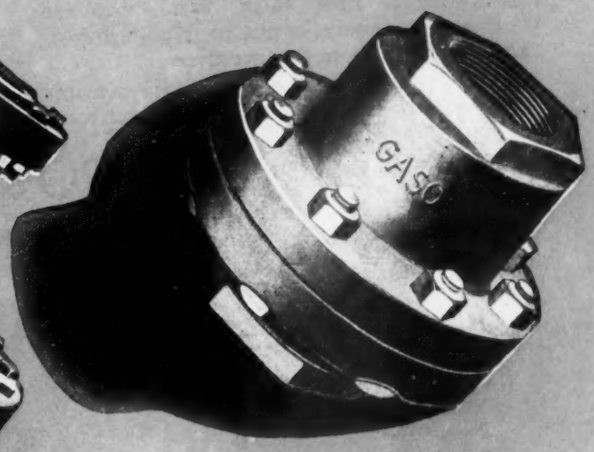
GASO PUMP & BURNER MFG. CO. .. *Tulsa, Oklahoma*

GASO GRAY IRON TEE

GASO GRAY IRON ELL



GASO PIPE LINE STRAINER



GASO BECKWITH SWING CHECK VALVE

GASO PUMPS

for every oil industry need

It's not so much what you are promised as who makes the promise that counts—

BRIDGEPORT HYCHROME GUARANTEED DRILLING BITS

A promise may mean much or little, depending on the one who makes the promise and his ability to make it good. The keeping of a promise is not always a question of the sincerity of the maker but rather of his ability to keep faith. What you are promised is generally not nearly so important as who makes the promise.

We guarantee the pin on our Hychrome Bits because we know that our Hychrome pin has 100% more elasticity, has 50% greater tensile strength and is 50% harder than the best grade of steel used in ordinary pins.

Should the pin on a Bridgeport Hychrome Drilling Bit "break off," "jump off" or "pull off," we will replace the bit or refund your money. We give you a written guarantee with every set of Hychrome Drilling Bits purchased.

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**A complete stock of contractors' supplies carried in stock at these points.*

A BRIDGEPORT BIT